



Area-based Integrated Health Systems for Children and Young People from Out-of-Home Care in Victoria

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This paper has been produced independently by the author as Honorary Academic Advisor to a collaborative project led by staff from the Victorian Department of Health and Human Services North Division. The project aims to further develop and improve health service responses to the needs of children and young people from out-of-home care.

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ABBREVIATIONS

AAP	American Academy of Pediatrics
AACHP	American Academy of Child and Adolescent Psychiatry
ACSQHC	Australian Commission on Safety and Quality in Health
ADHA	Australian Digital Health Authority
AMCHP	Association of Maternal and Child Health Programs
BACCH	British Association of Community Child Health
DEECD	Department of Education and Early Childhood Development
DHHS	Department of Health and Human Services
GP	General Practitioner
MVPHN	Murray Valley Primary Health Network
NHS	National Health Service
NICE	National Institute for Health and Care Excellence
OOHC	Out-of-home care
RACP	Royal Australasian College of Physicians
RACGP	Royal Australian College of General Practitioners
RCGP	Royal College of General Practitioners
RCN	Royal College of Nursing
RCPCH	Royal College of Paediatrics and Child Health
VAGO	Victorian Auditor-General's Office

KEY MESSAGES

Victoria's recent strategic plan for health services and infrastructure design 2017-2037 prioritises the development of preventative, integrated health systems in the community for vulnerable children.

The healthcare needs of children in statutory out-of-home care (OOHC), some of our most vulnerable children, have historically struggled for attention in the labyrinth of contested and complex problems in the child protection field. A long unresolved debate has been whether such needs are a primarily a social or medical problem. The Victorian Children, Youth and Families Act 2005 envisages that the healthcare needs of children in statutory care are primarily a health systems problem. The Act confines the role of the government's child protection service arm to that of promoting and making provision for child development and having regard for children's treatment needs 'as a good parent would'.¹ The Act authorises the Secretary to work with other government agencies and community service organisations to ensure that children in statutory care receive appropriate health opportunities. However, no specific accountabilities are attached.²

As in other Australian jurisdictions, poorly developed health record-keeping and health monitoring systems for children in OOHC have left Victoria without a key handrail of health service planning policy; that of health needs data. Furthermore, the low volume of health-systems related Australian research about children from OOHC, coupled with the fact that Australian jurisdictions have taken a variety of largely unevaluated approaches to addressing health in OOHC have inhibited learning opportunities for Victorian health services about systems improvement.

Research and practice in overseas and other Australia jurisdictions show that sustainable health service reform and innovation in Victoria to better meet the needs of these children would require:

- *a new vision for integrated, coordinated health systems at the division and area levels if not the state-wide level;*
- *co-design with carers, young people, health professionals and child protection practitioners to ensure new systems are usable;*
- *new mechanisms for jointly authorising ongoing systems development across the child protection and health arms of the Department of Health and Human Services including joint executive forums and memoranda of understanding or partnership agreements;*
- *new clinical governance systems for health care for children from OOHC;*
- *new health and child protection workforce development initiatives to enhance workforce attitudes, skills and knowledge relating to the health of maltreated children;*
- *re-designed policies and procedures which are congruent between the sectors to strengthen the inter-sectoral interface;*
- *the creation of new, permanent workforce positions to undertake integrative and clinical functions.*

¹ Victorian Government *Children, Youth and Families Act (CYFA) 2005*, S. 147 (1)(b)

² CYFA S.16(1)(a)

While current Victorian government health services policies authorise community health programs to give priority to children from OOHC there is no legislative or regulatory imperative to do so. This leaves health services to make autonomous decisions at the local level about whether to exercise that authority. Table 1 illustrates the transformation that would be required to move from current autonomous systems to integrated health systems for children from OOHC. Organisations would need to develop common values and accountabilities about health service quality for children from OOHC, they would need to develop a common mission, to apply core resources to that mission, to assign governance responsibilities and to develop workforce and data capacities that could support integrated working.

Table 1: System characteristics along a continuum from autonomy to integration, reproduced from P. Thistlethwaite (2008) A practical guide to integrated working, London, Integrated Care Network, Care Services Improvement Partnership.

	Autonomy	Coordination	Integration
Vision of system	Individual perspective	Shared commitment to improve systems	Common values All are accountable
Nature of partnerships	Own rules Occasional partnership	Time-limited or similar cooperative projects	Formal mission statements Legislation
Use of resources	To meet self-determined objectives	To meet complementary objectives Mutual reinforcement	Used according to common framework
Decision making	Independent	Consultative	Authority delegated Single process
Information	Used independently	Circulates among partners	Orients partners work towards agreed needs

This discussion paper begins from the Victorian government’s strategic priority for preventative, integrated health systems for vulnerable children and draws on existing Victorian government policy frameworks to propose a way forward for area-based health services innovation

EXECUTIVE SUMMARY

Abuse and neglect in childhood can be detrimental to health and development through the whole life-course. Placement in OOHC is a last resort for ensuring safety from such maltreatment. Children and young people from out-of-home care demonstrate higher rates of complex and chronic health conditions than other children.³ International conventions, research and clinical practice guidelines now recognise that most children in statutory OOHC need high-quality, well-coordinated health care to redress the health impacts of past maltreatment and minimise impacts on their future health.

The Victorian challenge

For more than 20 years, public inquiries in Victoria have repeatedly documented a lack of careful and systematic health needs assessment and appropriate health care provision for children and young people in statutory OOHC. The extent of these children's health needs is a complex challenge for those working in the field.

Fundamental to this challenge are the contrasting 'world views' held in the child protection and health sectors around the issue of children's health. A broad scan of Victorian policy and procedural guides suggests that child protection is interested in health mainly in terms of:

- the potential implications of a child's health status or healthcare needs on the child's safety;
- the parent or carer's capacity to meet the child's needs;
- the stability of any statutory care arrangements;
- the likelihood of family reunification.

While health is one dimension of a child's overall best interests to be considered, it is not the paramount concern in everyday child protection work. There are no agreed national health-related outcome measures for children from OOHC. Furthermore, while health practitioners are recognised as one group in a range of informants who can provide information to guide child safety and care placement decisions, they are not considered as members of the child's 'care team' in legislation, policy or practice. This in turn creates a barrier to the transfer of information from the child protection sector about child and family medical histories to health professionals and a barrier to systematic referral of children for clinical assessments of children's health status and healthcare needs or for healthcare.

In contrast a child's health status, healthcare needs, health-related quality of life and life-course health trajectory are of paramount importance to health professionals. Child protection case managers and carers acting *in loco parentis* navigate the complex health sector on a child's behalf and accompany the child during examinations and treatments. In this capacity, health professionals expect them to be highly informative about all aspects of the child's current and past health. These tasks are challenging for the child protection sector and may not be given priority. Doctors strongly value complete and accurate child and family medical histories and continuity of medical care. They expect to take a lead in clinical case coordination. Health professionals need clarity around medico-legal issues such as consent to treatment and are keen to avoid red-tape.⁴ When interactions with the child protection sector thwart these values or expectations, doctors may experience a sense of despair for both their professional role and for the child and may disengage from the sector.

There has been no legislative imperative for state-funded health services to assume responsibility for coordinating healthcare for children from OOHC in Victoria. This, coupled with limited clinical evidence of health status and health needs in the local OOHC population has hampered health services from stepping forward to improve health service provision for children from OOHC.

³ The term children should hereafter be read as including children and young people aged 0-17 years.

⁴ S.M. Webster & M. Temple-Smith (2010) Children and young people in out-of-home care: are GPs ready and willing to provide comprehensive health assessments for this vulnerable group? *Australian Journal of Primary Health*, 16, pp. 296-303.

Why the Discussion Paper has been introduced

A Library Fellowship Paper for the Parliament of Victoria⁵ provided a retrospective review of child protection legislation, policies and systems since 1989 as they relate to health and health services for children in statutory OOHC in Victoria. That paper summarised key challenges for the government and broadly identified building blocks for improved health systems design.

In 2017 the Victorian government released a new state-wide health services plan to guide service planning and infrastructure development over the next 20 years.⁶ One of the key priorities described in the plan is to develop preventative and integrated health systems for vulnerable children. This is consistent with the state-wide plan's overarching system design principle that future health systems design will be driven by population needs and underpinned by a strong focus on prevention and early intervention.

The Victorian Department of Health and Human Services (DHHS) North Division has expressed a desire to begin area-based health systems development to better meet the healthcare needs of children in OOHC within the Division. This discussion paper builds on the author's previous retrospective review by looking forward in exploring in detail some of the key elements and functions recommended for new health service models for this significant paediatric population. Health system reform would require ongoing reflection and decision making among executive and senior operational staff in the Victorian government, community service organisations, primary health networks, health service providers, area-based service planning governance groups, and others who have an interest in the development of integrated health and social care responses for children from OOHC. This paper is designed to support that work.

Policy Context

Several DHHS policy positions have authorised state-funded health services to give priority to the healthcare needs of children in OOHC. While past and ongoing small-scale initiatives have sought to better assess healthcare needs and develop healthcare plans for some children in OOHC significant further health systems development and reform is warranted. This discussion paper takes and adapts the DHHS *Caring for People with Chronic Conditions: Guidelines for the Community Health Program*⁷ as an appropriate existing framework on which new primary-care-based healthcare models for children and young people from OOHC could be developed.

Limited components of the Chronic Care Model (on which the DHHS guidelines are based) were introduced by New South Wales Health in 2010 through area-based programs. Over the subsequent three years more than 4500 children in OOHC had their health needs systematically assessed. Evaluators conservatively estimated that the long-term net financial gain of even this limited implementation was \$10,000 per child in avoidable health and other service costs from the time of assessment in OOHC up to the age of 18, and \$700,000 per child through improvements in the health, educational and social outcomes over their lifetime after they left OOHC.⁸

What the Discussion Paper provides

The DHHS North Division aims to develop sustainable, area-based integrated health service models to meet the healthcare needs of children from OOHC. Area-based approaches can be an efficient way to deliver intensive periods of investment to a target population and can produce added benefits if new synergies and

⁵ S.M. Webster (2016) *Children and Young People in Statutory Out-of-Home Care: Health Needs and Health Care in the 21st century*. Library Fellowship Paper No. 1, March 2016, Melbourne: Parliamentary Library & Information Services, Department of Parliamentary Services, Parliament of Victoria.

⁶ Victorian Government Department of Health and Human Services (2017) *State wide design, service and infrastructure plan for Victoria's health system 2017-2037*. Melbourne: DHHS

⁷ Victorian Department of Health and Human Services (2016) *Care for People with Chronic Conditions: Guidelines for the Community Health Program* November 2016. Melbourne: DHHS.

⁸ Nous Group (2014) *Formative evaluation of health assessment processes and coordination for children and young people entering out-of-home care: final evaluation report*, Sydney: NSW Kids and Families.

partnerships emerge from area-based collaboration.⁹ Collaborators may be more effective in identifying problems and developing solutions. Activities focused within a defined administrative area can be developed to test ideas and foster innovation at an affordable scale.¹⁰ If properly monitored and evaluated, such activities can produce important learning for state administrations about how to enhance the effectiveness and efficiency of their broader programs and services.¹¹

Area-based systems will vary, given differing geography, health service configuration, local population needs, health workforce availability and local priorities. Notwithstanding such variations, robust health systems for children from OOHC are likely to have important characteristics in common such as an area-wide appreciation of the life-long health implications of child maltreatment, shared visions for meeting the healthcare needs of all affected children, common understandings of the population to be served, effective governance, strong clinical leadership and support for ongoing professional partnerships between the child protection and health sectors. This paper identifies and explores core concepts, systems elements and functions and critical questions that would need to be addressed in area-based health service analysis, planning and design to best meet the needs of children in OOHC, drawing on:

- concepts and values-based ideas taken from policy and research literature;
- the policy positions of Australian, U.S. and U.K. colleges of medical professionals about currently accepted good clinical practice;
- research around factors affecting health care provision in OOHC, both in Australian and other jurisdictions;
- evaluations of relevant past and current initiatives.

Resource and reference materials which may be of interest and are available in the public domain are signposted.

Limitations

Aboriginal and Torres Strait Islander children are disproportionately represented in statutory OOHC. Victorian policies and programs acknowledge specific cultural meanings around health, healthcare and cultural safety for these children. This discussion paper does not attempt to review or propose specific reforms in relation to current Aboriginal community-controlled health service provision for children in OOHC. Such a review would require community involvement and specific cultural competence which are outside the author's scope and expertise.

Some children in statutory OOHC receive specialised disability support services which are important in addressing their health needs. This paper does not discuss specialist systems which cater for the additional needs of children with disabilities.

The Victorian Forensic Paediatric Medical Service (VFPMS) is a state-wide specialist medical service which provides forensic and holistic health assessments for children under the age of 18 when child abuse or neglect is suspected. Similarly, the Children's Court Clinic conducts child psychological and psychiatric assessments for the Children's Court of Victoria. Some of the children assessed by the VFPMS or the Children's Court Clinic may subsequently enter statutory OOHC. This paper does not address health systems issues relating to forensic or court-ordered health assessments.

⁹ H. Thomson (2008) A dose of realism for healthy urban policy: Lessons from area-based initiatives in the U.K., *Journal of Epidemiology and Community Health*, 62, pp.932-936.

¹⁰ G. Smith (1999) *Area-based initiatives: the rationale and options for area targeting*, LSW STICERD Research Paper No. CASE025. London, Centre for Analysis of Social Exclusion (CASE) and Suntory & Toyota International Centre for Economics and Related Disciplines, The London School of Economics and Political Science.

¹¹ T. Haase, K. McKeown (2003) *Developing disadvantaged areas through area-based initiatives: reflections over the past decade of local government strategies*. Dublin, Area Development Management.

INTRODUCTION

Background

The Victorian Department of Health & Human Services North Division is one of four operational divisions formed to oversee and coordinate the funding and delivery of services and initiatives across the state. Administratively the North Division is made up of four distinct areas; Mallee, Loddon, Hume Moreland and North-Eastern Melbourne, each encompassing between three and six local government areas. In July 2017 the Deputy Secretary of the North Division asked health service stakeholders within the Division to work together on a new push for sustainable health systems improvement for children and young people from out of home care (OOHC) in the Division. Seed funding was provided (through Banyule, Bendigo and Sunraysia Community Health Services) to support preliminary exploratory work on area-based service design. Area-based or catchment-based approaches to service planning and delivery for vulnerable children have been promoted by DHHS over the past few years.¹²

Children and carers in focus

The increased risk of life-long chronic and complex health conditions among people who have experienced childhood maltreatment provides the most compelling reason for a focus on the quality of health care systems for maltreated or vulnerable children. Considering that removal to OOHC¹³ is usually a last resort for keeping children safe, those who come into care are among the most vulnerable. Every year the rate of children living in OOHC in Victoria increases. In 2016-17 more than 7 in every 1000 children lived in some form of OOHC, most commonly after legal orders were made to protect them from emotional, physical or sexual abuse, neglect or exposure to family violence.

The significant numbers of children and young people who are on the edge of care, are in care or have recently left care are the focus of new interest in building area-based integrated health care responses in the DHHS North Division. The Children and Families Act 2005 recognises that young care leavers may require support from statutory authorities up to the age of 21. Tables 2-4 provide a range of 2016-17 state-wide data about the population of children in focus and the numbers of foster and kinship carers and community service organisations who would be affected by area-based integrated health system models. This data illustrates that in 2016-17 more than 12,300 children lived in OOHC in Victoria at some point during with year, cared for by more than 7500 foster or kinship carers. While state-wide data about children in care is publicly reported, division and area-level data is not readily available to local health service planners.

¹² Victorian Government Department of Health and Human Services (2012) *Child and Family Services Alliance Catchment Planning Reference Guide*. Melbourne, DHHS.

¹³ Out-of-home care (OOHC) refers to the care of children and young people up to 18 years of age who are unable to live with their families (most often due to unacceptable risk of abuse or neglect). OOHC involves placement with alternate care givers on a short or long-term basis. OOHC can be arranged either formally or informally. Informal care refers to arrangements made without intervention by statutory authorities or courts, and formal care occurs following child protection intervention (either by voluntary agreement or by a care and protection order). The purpose of OOHC is to provide children who are unable to live at home due to significant risk of harm with a placement which ensures their safety and healthy development. The Australian Institute of Welfare describes the four main types of OOHC as:

- Residential care: placement is in a small residential building where employed staff care for children;
- Family group homes: homes for children provided by a department or community sector organisation with live-in, non-salaried carers who are reimbursed or subsidised for the provision of care;
- Home-based care: placement in the home of a carer who is reimbursed for expenses for the care of the child. Home-based care includes relative or kinship care, foster care and other home-based OOHC;
- Independent living: includes private board and lead tenant households
- Other: placements that do not fit into the above categories and unknown placement types which may include boarding schools, hospitals, hotel/motels.

Table 2: Numbers of young people aged 0-17 years in focus in Victoria

Numbers of children on the edge of OOHC, in OOHC or leaving OOHC	Victoria
Reports on unborn children	2173
Substantiated reports	16793
Re-substantiated reports within 12 months	2873
Admitted to OOHC during the year	3739
Lived in at least one OOHC placement during the year	12314
Daily average number of children in OOHC placement	9446
Children who exited from OOHC during the year	3307

Source: Victorian Department of Health & Human Services (2017) *Annual Report 2016-2017. Child Protection and Family Services Additional Service Delivery Data 2016-2017*, Melbourne: Author

Table 3: Number of active foster carers supported by community service organisations in Victoria at March 2017

DHHS Division	Number of community service organisations supporting foster carers	Number of active foster carers by North Division area
North Division	7	405
South Division	13	620
East Division	10	402
West Division	10	171
TOTAL		1953

Source: Foster Care Association of Victoria (2017) *Foster Carer Snapshot 2017 – Active carers segmented by Community Service Organisations in each DHHS Division and area*, Melbourne: Author.

Table 4: Number of funded kinship care places in Victoria 2016-2017.

Support organisation	Number of kinship carer placements funded in Victoria
Community service organisations	750
Aboriginal community-controlled organisations	88
Department of Health and Human Services	4739
TOTAL	5577

Source of Victorian data: Victorian Ombudsman (2017) *Investigation into the financial support provided to kinship carers*, Melbourne: Author.

Health systems reform

Why is there a need to develop new models of integrated care for children and young people from OOHC in Victoria? Providing high quality health care is core business for health services. However, for more than 20 years public inquiries in Victoria have repeatedly documented a lack of careful and systematic health needs assessment and appropriate health care provision for children and young people in OOHC. Australian research which has reported on clinical health assessments of children in OOHC has recorded higher than average rates of chronic and complex health difficulties as well as concerns about lack of timely identification of health needs or timely receipt of healthcare interventions.

Barriers to effective health services planning

A lack of local OOHC population clinical data has hampered both effective health service planning and health advocacy for these children.

Child protection practitioners in government agencies and community service organisations and foster and kinship carers are not usually trained health professionals. They have faced unreasonable expectations in the past that they would have the time, knowledge, skill, resources or authority to effectively integrate social care with high-quality health care for individual children.

Children and young people in OOHC:

- are less likely than average to have experienced continuity of health care, for example by regularly attending a family medical practice;
- are less likely than average to have experienced continuity of caregivers;
- are more likely than average to move between different geographical locations;
- are more likely than average to be adversely impacted because caregivers and health professionals lack complete and accurate information about the child and family medical history;
- can be a hidden population from the health sector's perspective.

Policies supporting reform

Victoria's recent strategic plan for health services and infrastructure design over the next 20 years prioritises the development of preventative, integrated health systems in the community for vulnerable children.¹⁴

Several Victorian government interdepartmental agreements and guidelines (summarised in Table5) already signal the priority which can and should be given to children from OOHC by government-funded health services. The most recent of these is the *Health Care that Counts* framework for improving health services for vulnerable children and families.¹⁵

¹⁴Victorian Government, Department of Health and Human Services, (2017) op. cit.

¹⁵Victorian Government, Department of Health (2017) *Health Care that Counts: A framework for improving care for vulnerable children in Victorian health services*. Melbourne, DHHS.

Table 5: Victorian Government policies, agreements and guidelines which authorise state-funded health services to prioritise children from out-of-home care

Policy, Guideline or Partnership Agreement	Summary of provisions relating to children from OOHC
Victorian Government Department of Health and Human Services (2017) <i>State wide design, service and infrastructure plan for Victoria's health system 2017-2037.</i>	Makes integrated care across the health and social care systems a priority. The strategic intent is to build preventative and integrated care systems for vulnerable children and families.
Victorian Government Department of Health (2017) <i>Health care that counts: A framework for improving care for vulnerable children in Victorian health services.</i>	Provides guidance to enable health services to embed organisational governance, systems and processes that are focussed on vulnerable children and families. Directs that health services put in place policies and strategies to ensure children from OOHC receive priority service.
Victorian Government Department of Health (2016) <i>Care for People with Chronic Conditions: Guidelines for the Community Health Program</i> Victorian Government Department of Health and Human Services (2016) <i>Community Health Integrated Health Guidelines: Direction for the Community Health Program.</i>	Guides Community Health Services to lead integrated, coordinated healthcare for children with complex and complex health and social needs Authorises Community Health Services to prioritise children from OOHC.
Victorian Department of Human Services, Department of Education and Early Childhood Development, Municipal Association of Victoria, Early Learning Association Australia (2014) <i>Early Childhood Agreement for Children in Out of Home Care.</i> Melbourne, DEECD.	Gives priority access to free universal early childhood intervention services from birth to school entry for children from OOHC who have a disability or developmental delay. These services comprise enhanced maternal & child health services and free kindergarten places for 3-year old children. Agrees on a system whereby child protection authorities will notify local governments of children from OOHC eligible for maternal & child health services.
Victorian Government Department of Health (2011) <i>Priority access for out-of-home care.</i>	Promotes priority access to triage and assessment by Area Mental Health Services for children from OOHC. Exempts children from OOHC from the need to meet the criteria for a likely diagnosis of mental illness.
Victorian Department of Human Services and Victorian Department of Education and Early Childhood Development (2011) <i>Out of Home Care Education Commitment: A Partnering Agreement between Department of Human Services, Department of Education and Early Childhood Development, Catholic Education Commission of Victoria and Independent Schools Victoria.</i> Melbourne, DHS, DEECD.	Signifies a commitment to prioritisation of referrals to education-related health and well-being services such as psychology, speech pathology, social work, student welfare coordinators, visiting teachers, a program for students with disabilities and welfare officers who can support students with behavioural, mental health or welfare issues.
Victorian Government Department of Health (2009) <i>Community Health Priority Tools.</i> Melbourne, DH.	Authorises Community Health Services to accord children from OOHC the highest priority, usually in the form of the next available appointment, irrespective of a child's clinical status at the time of intake.

The government's strategic plan 2017-2037 flags its intent to strengthen the role of community health services to take a key role in driving integration and supporting vulnerable children. Since 2009 the Department of Health has authorised community health services to give the highest level of priority to children from OOHC and those on the edge of statutory care whose families receive Child First services.^{16,17,18} This authority is premised on the complexity of these children's need for services rather than the complexity of any single health condition they may have and is accorded regardless of their clinical presentation at a point in time. Such children have been recognised as having complex care needs requiring coordinated, inter-agency team-based approaches. Services have been authorised to give these children highest priority to ensure the best health outcomes are achieved, and to prevent inefficiencies that occur when services are not coordinated. However, while the policy has allowed services to give the next available appointment to these children this has primarily been in the context of managing service demands and was not accompanied by other policy changes which would be needed to establish integrated healthcare.

Current initiatives and research

Three targeted initiatives are currently in place which seek to link, and in some instances to coordinate OOHC and health services. These initiatives impact on some of the children in OOHC within the North Division. Firstly, two area-based OOHC Health and Education Assessment Coordinators are employed, recurrently funded under an inter-departmental agreement¹⁹ to facilitate education-related health care plans for children and young people in residential OOHC who are generally aged 11-17.

Secondly, the DHHS *Pathway to Good Health* initiative which aims to ensure health assessments and healthcare planning for children aged 0-12 years entering OOHC for the first time has operated in the north and west metropolitan areas since 2012 and continues through 2018 with lapsing annual funding. Although this initiative was evaluated by ACIL Allen Consulting in 2015, the evaluation report was not publicly released.

Thirdly, DHHS and community service organisations have a responsibility under an interdepartmental agreement to notify local government maternal and child health services of all young children placed in OOHC in the local catchment.²⁰ The aim of such notifications is to ensure that children are:

- provided with timely, flexible and responsive maternal and child health care through key ages and stages visits and additional consultations as required;
- given timely and appropriate referrals to specialist services as required.

In the field of mental health, the developmental therapeutic program *Take Two*, provided under a partnership arrangement between Berry Street, Latrobe University, Mindful and the Victorian Aboriginal Child Care Agency with funding from DHHS provides area-based intensive treatment services for children from OOHC who exhibit or are at risk of developing severe emotional or behavioural disturbances.

¹⁶ Victorian Government Department of Health (2009) *Community Health Priority Tools* Melbourne, DH.

¹⁷ Victorian Government Department of Health and Human Services (2015) *Community Health Integrated Health Guidelines: Direction for the Community Health Program*. Melbourne, DHHS.

¹⁸ Victorian Government Department of Health and Human Services (2015) *Child Health Services: Guidelines for the Community Health Program*. Melbourne, DHHS.

¹⁹ Victorian Government Department of Human Services and Victorian Department of Education and Early Childhood Development (2011) *Out of Home Care Education Commitment: A Partnering Agreement between Department of Human Services, Department of Education and Early Childhood Development, Catholic Education Commission of Victoria and Independent Schools Victoria*. Melbourne, DHS, DEECD.

²⁰ Victorian Government Department of Human Services, Department of Education and Early Childhood Development, Municipal Association of Victoria and Early Learning Association Australia (2014) *Early Childhood Agreement for Children in Out of Home Care* Melbourne, DEECD.

In a research initiative, a consortium of organisations led by Prof Helen Herrman from the Orygen National Centre of Excellence in Youth Mental Health and the Centre for Youth Mental Health at the University of Melbourne have been involved in three studies since 2012. These aim to test the impact of mental health needs assessments and complex mental health interventions for a sample of young people aged 12-17 years in the northern and western metropolitan areas.²¹ Preliminary papers from these studies have been published and further papers are likely.

It is important to acknowledge that through program and research initiatives such as these, clinical assessment of health status and healthcare needs occurs for *some children* in OOHC, *in some circumstances* in the North Division. However, the extent to which all children in OOHC have their healthcare needs clinically assessed and treated is not routinely reported by the health sector and therefore remains unknown.

A vision for area-based integrated health care systems

The extent of these children's health needs poses a complex challenge for those working in the field. A retrospective review of public policy and programs between 1989 and 2015²² concluded that significant changes will be needed if Victorian governments are to more successfully address the challenge in the future. The review suggested that:

*...children in statutory OOHC could benefit if regional health service planners were given responsibility for designing local health needs assessment services. Regional approaches could incorporate health workforce training, serious case review processes and clinical care pathways for children with very complex needs. Health service planning and evaluation could be tailored according to the documented health care needs of children in statutory OOHC in the region.*²³

As will be discussed in further detail later in this paper, integration has several meanings. An area-based integrated health service delivery design might be narrow or expansive in its purpose, striving for any of four degrees of service integration from linkage to full integration as illustrated in the continuum shown in Figure 1.²⁴ This paper recognises that past and present initiatives in Victoria have focused on service coordination but have fallen short of integrated approaches. Integrated healthcare is recognised in England and the U.S. as current best-practice for children from OOHC. Implementing integrated systems would require a long-term vision and detailed strategy.

²¹ H. Herrman, C. Humphreys, S. Halparin, K. Monson, C. Harvey, C. Mihalopolous, S. Cotton, P. Mitchell, T. Glynn, A. Magnus, L. Murray, J. Szwarc, E. Davis, S. Havighurst, P. McGorry, S. Tyano, I. Kaplan, S. Rice, K. Moeller-Saxone (2016) A controlled-trial of implementing a complex mental health intervention for carers of vulnerable young people living in out-of-home care: the ripple project. *BMC Psychiatry*, 16: 436.

²² S.M. Webster (2016) *Children and Young People in Statutory Out-of-Home Care: Health Needs and Health Care in the 21st century*. Library Fellowship Paper No. 1, March 2016, Melbourne: Parliamentary Library & Information Services, Department of Parliamentary Services, Parliament of Victoria.

²³ Webster (2014), op. cit. p. 43.

²⁴ British Association for Community Child Health (2012) *The meaning of 'integrated care' for children and families in the U.K. Position Statement*. London, BACCH.

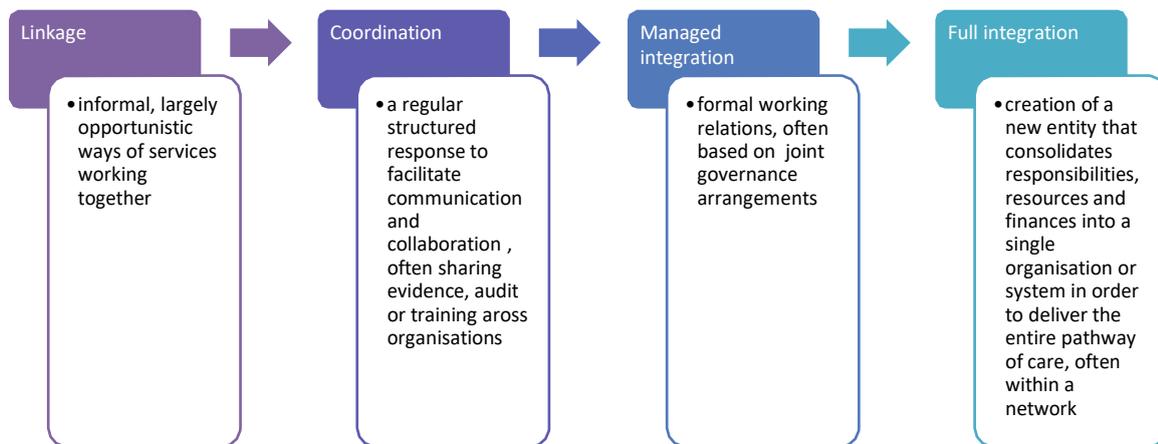


Figure 1: Levels of health service integration as described in the British Association for Community Child Health (2012). *The meaning of integrated care for children and families in the U.K. Position Statement.*

Using a ‘Chronic Care Model’ for children from OOHC

Existing DHHS policy frameworks can provide a starting point for moving towards integrated systems. Enacting current policies about care coordination effectively could be a realistic starting point for any new-area-based model.

DHHS guidance on Care for People with Chronic Conditions²⁵ endorses the use of a Chronic Care Model framework within the Community Health Program both for children and adults. The Chronic Care Model, which has been widely adopted internationally over the past 20 years, is designed to help health services

*improve patient health outcomes by changing routine delivery of ambulatory care through six interrelated systems changes meant to make patient-centered, evidence-based care easier to accomplish. The aim...is to transform...care...from acute and reactive to proactive, planned and population-based.*²⁶

The model aims for skilled, proactive, planned healthcare coordination. Comparable aims are found in U.S. standards for systems of care for children and youth with special health care needs,²⁷ and in the English National Institute for Clinical Excellence public health guidance on looked-after children

²⁵ Victorian Government Department of Health and Human Services (2016) *Care for People with Chronic Conditions: Guide for the Community Health Program*. Melbourne, DHHS.

²⁶ K. Coleman, B. Austin, C Brach, E.H. Wagner (2009) Evidence on the Chronic Care Model in the new millennium. *Health Affairs*, 28 (1), pp.75-85.

²⁷ Association of Maternal & Child Health Programs (2017) *Standards for systems of care for children and youth with special health care needs Version 2*, June 2017. Washington DC.

and young people.²⁸ As such the model is a reasonable although not perfect ‘fit’ for children from OOHC. This paper illustrates how the Chronic Care Model could, with some minor but essential modifications, be adapted for developing Community Health Service-led area-based healthcare models for children from OOHC.

The DHHS (2016) *Care for People with Chronic Conditions Guidelines* draw from the Chronic Care Model. The guidelines support program managers to develop, plan and monitor services for people, including children, with chronic healthcare needs. They also outline how Victorian community health programs are expected to integrate with general practice and specialist health services to better meet those needs. The Chronic Care Model is built on the underlying principles that high quality, person-centered care is care that:

- is culturally responsive;
- is health promoting;
- focusses on early intervention;
- uses evidence-based practice;
- is team-based;
- promotes self-management capabilities;
- is goal-directed.

The delivery of integrated, multidisciplinary care to meet children’s physical, social and mental health needs is the primary objective of this approach. This type of care aims to provide comprehensive assessments and evidence-based interventions documented in collaborative care plans. The guidelines are designed to support the development of coordination and continuity of care between providers. The core elements of the Chronic Care Model are illustrated in Figure 2.

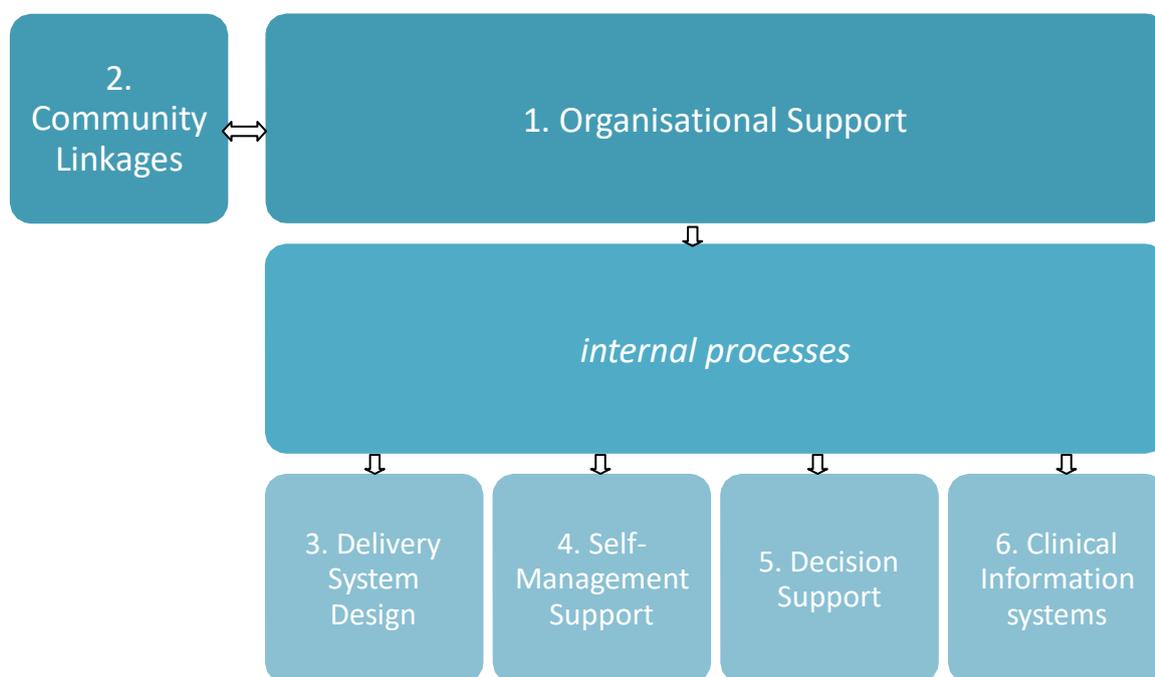


Figure 2: Core elements of Victorian Department of Health and Human Services (2016) Care for People with Chronic Conditions Guidelines

²⁸ National Institute for Health and Care Excellence (NICE) *Looked-after Children and Young People: Public Health Guideline PH28*, October 2010, updated May 2015.

Co-design of new preventive, integrated health systems

Co-design or participatory design is a process that involves both system users, system designers and people who are affected in some way by the way systems work.

The Victorian Government strategy 2017-2035 envisages the development of integrated systems that include:

- strong leadership across sectors and disciplines
- identifying children from OOHC, assessing their health needs and providing care before things get worse;
- providing multidisciplinary team care led by primary health care practitioners;
- effectively coordinating all types of care;
- using a single electronic medical record system with patient and clinician access

Foster, kinship and residential carers, child protection practitioners, community service organisation staff, health professionals, health service managers and policy advisors all have a stake in area-based integrated health systems for children from OOHC and should be involved in co-design.

The next sections of this paper provide a commentary on how each of the six core elements in the Chronic Care Model could support co-design processes. In discussing each of the elements, this paper:

- highlights where the *Care for People with Chronic Conditions* guidelines may need to be adapted;
- suggests common purposes and objectives relevant to children from OOHC;
- identifies systems which may require change;
- recommends relevant measures/ data for monitoring systems performances;
- describes potential points of systems failure;
- discusses accountabilities;
- poses critical questions for discussion

The remaining sections of the paper should be read in conjunction with the DHHS (2016) *Care for People with Chronic Conditions* guidelines.

MODEL ELEMENT 1: ORGANISATIONAL SUPPORT

OVERVIEW OF ELEMENT 1 FROM THE DHHS (2016) CARE FOR PEOPLE WITH CHRONIC CONDITIONS GUIDELINE: ORGANISATIONAL SUPPORT

Organisational vision, leadership and appropriate resourcing are required to deliver effective chronic care. Demonstrating organisational commitment to delivering effective chronic care requires community health services to:

- *have a long-term vision and organisational goals for delivering services that meet the needs of children and young people who have experienced maltreatment;*
- *articulate in their strategic, business and individual work plans how the organisation will implement the long-term vision for chronic care services;*
- *delegate overall responsibility for implementing and monitoring service provision for chronic care to the executive level of the organisation;*
- *allocate appropriate resources, including access to a multidisciplinary care team;*
- *have a suitably qualified and experienced practitioner to manage the multidisciplinary care team;*
- *routinely evaluate service processes and outcomes using a range of processes and indicators including consumer, community and practitioner experiences;*
- *use a proven improvement strategy to implement and monitor organisational goals*

Common purposes and objectives

While the authorising environment for community health services and some publicly funded health programs in Victoria allows and encourages service providers to give priority to children from OOHC there are few accountabilities for health service delivery to this population. The discretion rests with healthcare organisations to purposefully prioritise children from OOHC and allocate core resources to an integrated care model tailored to meet children's needs. In this discretionary environment intra and inter-agency agreements about the purposes and objectives of any model are of paramount importance.

One of the barriers to agreement has been lack of a shared world view about the concept of child health and the purpose of proactive attention to the health of maltreated children.²⁹

Several years after the development of national standards for OOHC, jurisdictions are yet to reach agreement on how to define or measure child health and wellbeing.³⁰

Incongruent ideas about child health abound. Individuals are prone to focus on single health dimensions. Health might be thought of as healthy attachment to a care-giver or health as a condition requiring consent to treatment. Views about the health of the OOHC population may fall along a continuum. At one end of the continuum is the idea that once removed to safety most of this population are basically as healthy as children not in care. An alternative view is that many children from OOHC are likely to experience developmental, physical, emotional or behavioural difficulties.

Similarly, ideas about health needs and how they can best be met can vary along a continuum. At one anchor point is a belief that needs are the same as for most children and can be met by opportunistic

²⁹ S.M. Webster (2014) *Fostering health: an Australian health policy and systems study of health assessment for children and young people in out-of-home care*, Thesis submitted for the degree of Doctor of Philosophy, University of Melbourne

³⁰ Australian Government Productivity Commission (2017) *Report on Government Services*, Canberra: Australian Government Productivity Commission p. 16.32

healthcare. Healthcare needs can alternately be understood as sometimes hidden, often chronic and complex and requiring proactive skilled and ongoing assessment and targeted, individual treatment approaches for children from OOHC. On an everyday basis, people may think about children's healthcare needs primarily in the context of their own roles. Need might just relate to making a medical appointment for an unwell child or finding support for a child with disturbed behaviour.

Developing agreement about purposes and objectives of any health service model would rest firstly on developing and articulating a coherent and shared understanding around the broader concepts of children's health and healthcare needs. This could assist everyone involved with a service model to talk and think in common terms.

A shared understanding of the concept of child health

Children's health and development are intertwined and dynamic. One useful way to think of a child's 'health' is as a capability; an ability to cope with life.³¹ Rather than being a static state, health is:

...the extent to which a child is able and enabled to develop and realise their potential, to satisfy their needs and to develop the capacities that allow them to interact successfully with their biological, physical and social environments.³²

A framework shown in figure 3 illustrates how different elements can be considered separately, but when taken together build a rounded picture that can help to better understand child health in terms of a child's capacity and capability. Table 6 describes each aspect in this illustration more fully. A framework such as this could help to focus attention in any area-based model on how the model will address different elements of children's health at different ages and stages of their development.

A shared understanding of children's health needs

A sustainable area-based model would be built on a cohesive understanding of the concept of health needs. Health need in OOHC is where a child's health or development may be at risk of being impaired without some remedial action. Need can also be thought of in terms of comparative need and equity when considering the higher than average incidence of chronic and complex health conditions found among children in OOHC. In health service planning terms, need can be understood as the capacity to benefit from a health service intervention such as health education, disease prevention, diagnosis, treatment or rehabilitation.³³ Children from OOHC are a paediatric population with special health care needs

who have, or are at increased risk for, a chronic physical, developmental, behavioural or emotional condition and who also require health and related services of a type or amount beyond that required by children generally.³⁴

³¹ I. Law & H. Widdows (2007) Conceptualising health: Insights from the Capability Approach *Health Care Analysis Journal*, 16(4), pp.303-315.

³² National Research Council and Institute of Medicine Committee on Evaluation of Children's Health (2004) *Children's Health, The Nation's Wealth: Assessing and improving child health*, Washington DC: The National Academies Press, p.33.

³³ J. Wright, R. Williams, J. Wilkinson (1998) Health needs assessment: Development and importance of health needs assessment, *British Medical Journal*, 316, pp.1310-1313.

³⁴ M. McPherson, P. Arango, H. Fox, C. Lauver, M. McManus, P. Newacheck, A. Perrin, A. Shonkoff, P. Strickland (1998) A new definition of children with special health care needs, *Pediatrics*, 102 (1) pp.137-140

Figure 3: A framework for conceptualising the elements that influence a child's developing capacity and capability to interact with their biological, physical and social environments.

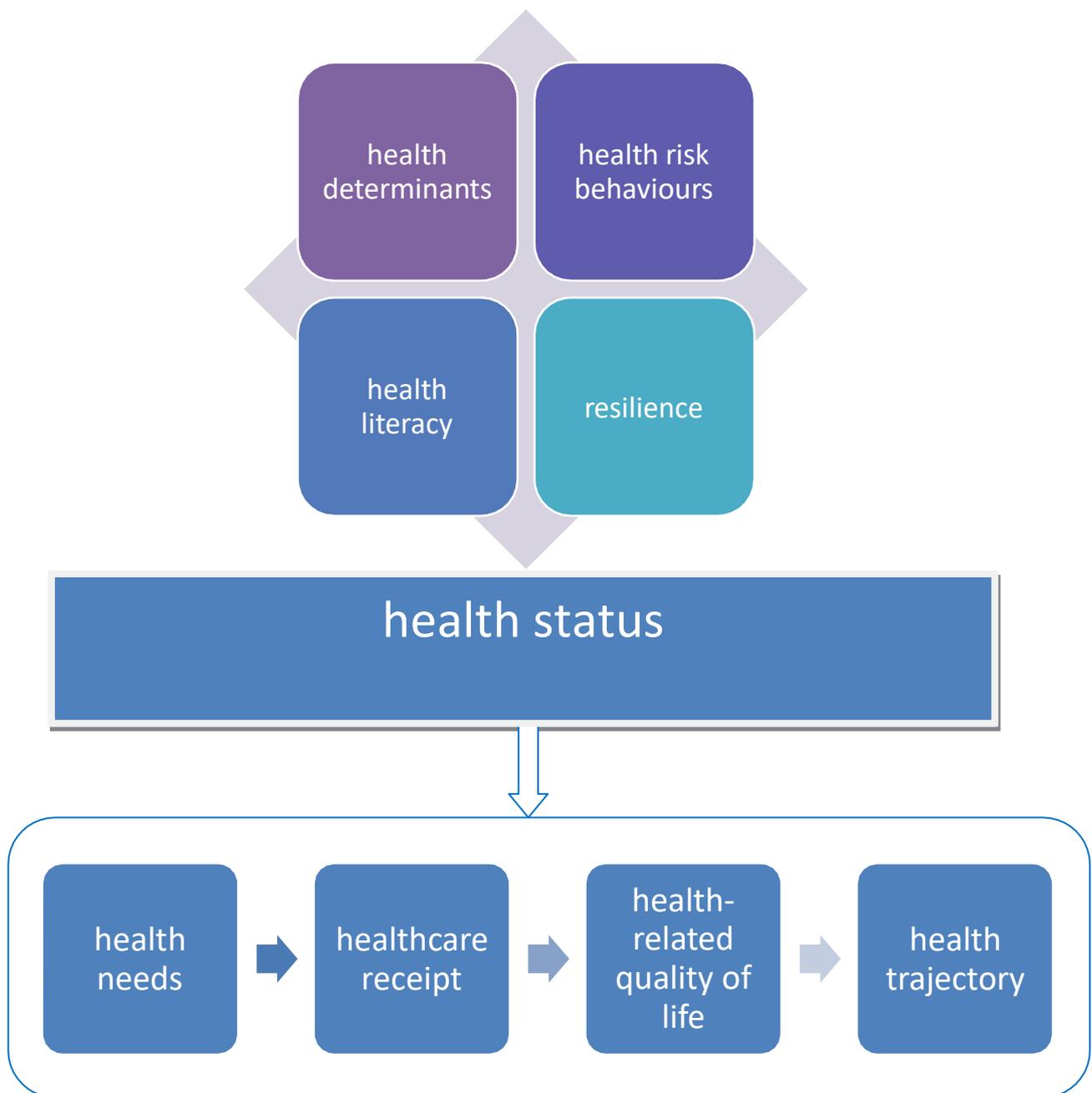


Table 6: Key elements related to the concept of child health, their descriptors and useful references

Element	Descriptor	Useful Reference
Health determinant	Health determinants are factors that interact to determine a child's health status. They include biological, behavioural, environmental and socio-economic factors. Health determinants may be non-modifiable or modifiable and may have either positive or negative effects.	T. Moore, M. McDonald, H. McHugh-Dillon (2015) <i>Evidence review: Early childhood development and the social determinants of health inequities</i> . Parkville Victoria: Centre for Community Child Health at the Murdoch Children's Research Institute and the Royal Children's Hospital
Health risk behaviours	While risk taking is a normal part of growing up some risk behaviours can pose significant risks to children's health. These behaviours include such things as early-age or high-risk sexual activity, drink driving, substance or alcohol abuse, severe dieting, self-harm, running away from home or assaulting others.	<i>Understanding Risk-Taking Behaviour</i> , in New South Wales Kids and Families (2014) <i>Youth Health Resource Kit: An Essential Guide for Workers</i> , Sydney: NSW Kids and Families, pp. 79-93.
Health literacy	Health literacy is the degree of cognitive and social skills which determine an individual's motivation and ability to gain access to, understand and use information in ways which promote and maintain good health.	World Health Organisation (1998) <i>Health Promotion Glossary</i> WHO/HPR/HEP/98.1., Geneva: WHO.
Resilience	Resilience is a dynamic process leading to positive adaptation in the face of significant adversity.	Victorian Health Promotion Foundation (2015) <i>Young Victorians' resilience and well-being survey: Summary Report</i> . Carlton South: VicHealth.
Health status	Health status is determined by describing or measuring aspects of the health of an individual or a population at a specific time. Health status is judged against identifiable standards (e.g. 20/20 vision).	World Health Organisation (1998) <i>Health Promotion Glossary</i> WHO/HPR/HEP/98.1., Geneva: WHO.
Health need	Health need is the capacity to benefit from a health service intervention such as health education, disease prevention, diagnosis, treatment, rehabilitation or even terminal care.	J. Wright, R. Williams, J. Wilkinson. (1998) Health needs assessment: Development and importance of health needs assessment. <i>British Medical Journal</i> , 316, pp. 1310-1313.
Health-related quality of life (HRQoL)	Health-related quality of life is an individual's subjective perception of the impact of health status, including disease and treatment, on physical, psychological and social functioning. Paediatric HRQoL measures are multi-dimensional to encompass the contextual factors of the child's environment which have a long-term influence and the comparatively weaker power of children to make changes to their environment when compared to adults.	L.S. Matza, A.R. Swensen, E.M. Flood, K. Secnik, N.K. Leidy (2004) Assessment of health-related quality of life in children: a review of conceptual, methodological and regulatory issues. <i>Value in Health</i> , 7,1, pp. 79-89.
Health trajectory	A health trajectory is a useful way to describe changes in an individual's health status over time.	S.J. Henly, J.F. Wyman & M.J. Findoff (2011) Health and illness over time: The trajectory perspective in nursing science. <i>Nursing Research</i> , 60 (3 Suppl), pp. S5-14.

A model which has systems to routinely and periodically assess health risks and their impacts on children's health needs and is built on the premise that many children in OOHC will need more than usual care, is more likely to be effective.³⁵

A population-based approach to meeting healthcare needs

At a population-level health needs assessment is a systematic approach to ensuring health service resources are used to improve the health of the population of children from OOHC in the most efficient way. Systematic data collection about individual child health needs can

- contribute epidemiological data to inform the design of effective health service delivery;
- better enable evidence-informed policy and improved service design;
- inform inter-agency collaboration, funding allocation or research priorities.

Population –based approach: a hypothetical example

Australian clinical research studies have raised significant concerns about the numbers of children from OOHC who with overdue immunisations, based on data-matching with the Australian Immunisation Register (AIR). Data about immunisation status based only on child protection case manager file audits may under-estimate the extent of this problem. If immunisation status on the AIR was clinically recorded and tracked for the OOHC population, then targeted area-based vaccination services could be developed specifically for this population, with the long-term objective that 100% of children in statutory care would receive all age-appropriate vaccinations in a timely way.

Systems approaches

The key systems in organisational leadership for any new model relate to governance (including clinical governance), stakeholder engagement, financial oversight, human resources management, monitoring, evaluation and accountability. These systems might be either:

- managed by the board of a lead agency; or
- managed by a newly formed governance group with multi-agency representation.

Good leadership and strong organisational approaches, particularly approaches that address integrated workforce management and implement successful workforce change are key to integrated systems.³⁶ Strong approaches would include the creation of new roles working across professional boundaries to support integrated service delivery, interdisciplinary training and co-location of services within an area.

Figure 4 illustrates a matrix which highlights likely outcomes related to the relative strength or weakness of leadership and organisational systems.

³⁵ Social Services Improvement Agency (2007) *What works in promoting good outcomes for looked-after children and young people?* Oxford, Institute of Public Care.

³⁶ Centre for Workforce Intelligence and Institute of Public Care (2013) *Think integration, think workforce: three steps to workforce integration.* Oxford, Institute of Public Care Oxford Brookes University and Centre for Workforce Intelligence



Figure 4: Matrix illustrating the outcomes of differing strengths of leadership and organisational approaches in integrated care systems, reproduced from Integrated Care Network, Institute of Public Care and Community Health Partnerships (2010) *From the ground up: a report on integrated care design and delivery*, Oxford, Institute of Public Care, Oxford Brookes University, p. 11

Measures and data

The state-wide health services strategic plan 2017-2037 flags the Victorian government's intention to invest in 'big data' to better inform health service planning and monitoring.³⁷ Given the paucity of data currently available to support effective and sustainable health service design, close attention is warranted to developing prospective measures which could enable organisational leaders to properly govern any new model. Examples might include:

- demographic data about children and their carers such as children's ages, types of care, and known health diagnoses. Or carers age profiles, health literacy levels, resources such as their own transport or capacity to meet certain types of health care costs for the child in their care;
- health workforce data
- financial data such as annual service expenditure on children from OOHC in each state funded health program, in total and per capita. Or the extent of annual out-of-pocket expenses that fall to carers annually for health-related services or equipment for children from OOHC.
- health service data for children from OOHC within the area such as:
 - emergency department use;
 - community health services use,
 - mental health services use
 - public dental health service use;
 - numbers of children from OOHC on waiting lists for publicly funded services;
 - actual waiting times for referred services;
 - number of health service types used per capita;
 - number of different health professionals assessing, treating or reviewing each child over time
 - numbers of children who have received scheduled universal services such as vaccination or maternal and child health checks.

Establishing systems to collect and monitor most of these types of data would need to be authorised and planned from the inception of any new area-based model. This would require multiple levels of agreement from authorising of the model's purpose and objectives, through stakeholder agreement and collaboration to strategic and business planning.

Although very little state-wide baseline data about service access is available at this time, current doctoral research by Dr Karen McLean at the Centre for Community Health at the Royal Children's Hospital and Murdoch Children's Research Institute Melbourne will analyse anonymised data for nearly all children who were in OOHC in Victoria between 2010 and 2015. The study will compare patterns of health service use before and after interventions related to the use of the National Clinical Assessment Framework for Children and Young People in OOHC and the Pathway to Good Health Program. Study results will be available in 2020.

³⁷ Victorian Government Department of Health and Human Services (2017) op. cit.

Potential points of systems failure

Organisational factors

Many complex organisational factors affect healthcare for this group of children.³⁸ Two evaluative studies in Australia highlight points of potential failure for any new area-based model. A cross-jurisdictional review of health assessment systems for children from OOHC in Australia identified the following organisational issues:

- insufficient high-level direction for inter-agency collaboration and joint accountability;
- lack of clarity around roles and responsibilities of government agencies;
- structural gaps in health service provision;
- lack of skills, understanding and cultural competences among service providers;
- disincentives for health service providers due to inadequate remuneration levels;
- constraints on inter-agency information sharing and information management capability.³⁹

Failure to design and consistently institute systems for monitoring new models of care from their inception has significantly hampered robust evaluation of previous initiatives.⁴⁰

Lack of a long-term strategy

It may take ten years or more to effectively build, implement, revise and refine a sustainable area-based health system for children from OOHC. Underestimating the costs and the complexity of the systems-change task, the power of opponents to block change, the potential of personnel changes over time to slow momentum, the investment needed in stakeholder engagement, multidisciplinary team support, information management and exchange capabilities and systems evaluation can result in disappointed hopes for quick results. Premature abandonment of models before they are properly embedded or evaluated can be both wasteful and disheartening and may damage commitment to subsequent efforts. It is important to design models on the understanding that ongoing learning processes and adaptation will be integral to eventual success.

Insufficient clinical leadership

As one of the formative steps in the Division's new reform approach in 2017-2018 a stakeholder forum⁴¹ was convened to discuss healthcare issues for children from OOHC and explore the potential for area-based health service models in the context of local capacity and resources. Following the forum, executive and senior operational-level personnel within DHHS and stakeholder organisations volunteered to become involved in leadership and governance for new area-based integrated healthcare models in the Division. Widespread engagement of doctors needed for children from OOHC might prove difficult unless clinical 'champions' such as paediatricians or GPs with a special interest in this field take on a leadership role. Attracting and retaining effective clinical leaders is complex and would require careful planning and investment.⁴² The Chronic Care Model includes an emphasis on clinical leadership at both governance and operational levels. Insufficient 'voice' at the governance

³⁸ M.S. Szilagyi, D.S. Rosen, D. Rubin, S. Zlotnik, Council on Adoption, Foster and Kinship Care and Committee on Adolescence and the Council on Early Childhood (2015) *Health care issues for children and adolescents in foster and kinship care*, Technical Report, American Academy of Pediatrics.

³⁹ ACIL Allen Consulting (2013) *Health assessments and interventions for children and young people in the child protection system, Options paper to the Department of Social Services*. Melbourne: ACIL Allen Consulting.

⁴⁰ Nous Group (2014), *op. cit.*

⁴¹ The *Health Care that Counts* Forum, held in Preston on 18 November 2017 was attended by more than 70 key stakeholders from community health services, primary health networks, community service organisations, hospitals and the Victorian Department of Health and Human Services.

⁴² H. Dickinson, M. Bismark, G. Phelps, E. Low, J. Morris & L. Thomas (2015) *Engaging professionals in organisational governance: The case of doctors and their role in the leadership and management of health services*. Issues Paper Series, Melbourne: Melbourne School of Governance, University of Melbourne.

level can result in doctors disengaging from government-led health systems change, especially if those changes are not congruent with current clinical practice, medical professional culture or the costs attached to change in clinical systems.

Failure to engage foster and kinship carers

Similarly, foster and kinship carers in the OOHC system hold considerable power to use or to circumvent any new model of integrated health care. Unless a health system model makes it easier for them to support the children they care for change may be difficult to institute and may not be sustainable. Foster and kinship carer representation on an area governance group would be critical.

Accountabilities

Victoria's Auditor-General has pointed to the need for the accountabilities of each participating organisation to be specified in formal agreements between organisations, along with a statement of shared vision, purpose, values and objectives. Formal agreements should also set out formal processes for decision making, the governance arrangements (which would typically include both an executive group and an operational group) and the policies and procedures which would guide reporting, evaluation and risk management.⁴³

⁴³ Victorian Auditor-General (2015) *Early intervention services for vulnerable children and families. Report 2014-15 No. 29*, pp. 1-54, (p.32). Melbourne, VAGO.

Critical questions

The following questions can assist those involved in co-design of a new area-based integrated healthcare system for children from OOHC to consider and discuss critical issues in organisational support.

1.1 To what extent do you agree with each of the following statements of principle which might underpin any area-based model?

- child health can be understood as the extent to which a child is able and enabled to develop and realise their potential, to satisfy their needs and to develop the capacities that allow them to interact successfully with their biological, physical and social environments;
- because of the potential health impacts of childhood maltreatment over the life-course, children on the edge of, living in or having left OOHC are populations with special healthcare needs;
- state-funded community health services are the publicly-funded organisations best-placed to drive the development of area-based integrated health systems for children who have experienced maltreatment.

1.2. In December 2017 the Hume Moreland Area project team drafted the following aims for Division-wide reform:

- To develop sustainable models of area-based integrated health service delivery to meet the clinically-assessed health care needs of children entering, living in and leaving out-of-home care within defined geographical areas in the Division;
- To promote ongoing quality improvement in area-based health service design and delivery to achieve integrated health and social care for children in OOHC;
- To enable stakeholders who have an interest in or are affected by changes in health service delivery to children from OOHC to contribute to ongoing quality improvement activities

Are these appropriate and acceptable aims for your area model?
Are there different or additional aims that should be considered?

MODEL ELEMENT 2: COMMUNITY LINKAGES

Overview of element 2 from the DHHS (2016) Care for People with Chronic Conditions guideline: Community linkages

Ensuring coordination and integration of care is an essential component in providing care for children from OOHC. This can only be achieved by working with other service providers and by engaging with local communities and community organisations. Supporting a more integrated health care service for children from OOHC requires:

- *Working with other services in the region to develop agreed care pathways, coordinate services and ensure care is provided in a timely manner and in the most appropriate setting;*
- *Developing partnerships with other services that will help to deliver coordinated care for participants in programs such as maternal and child health services, mental health programs or the National Disability Insurance Scheme;*
- *Participating in planning and collaborative work of local Primary Care Partnerships and Primary Health Networks*

DHHS Care for People with Chronic Conditions guide adaptation

Descriptors in the DHHS Care for People with Chronic Conditions guidelines warrant expansion in relation to linkages with general practitioners (GPs). Children need periodic medical examinations which only a GP or other doctor after referral by a GP can provide. The guide suggests a focus on communication and feedback to ensure GP follow-up care. The difficulty with this limited approach is that most GPs in Victoria are in private practice and work independently from government or public policy, especially child welfare policy. A model that seeks to integrate with general practice will require more than just communication with GPs about individual children. GPs may be either leaders, contributors or passive resisters in any integrated healthcare system. Their professional interests in improving systems for children from OOHC are most likely to be shaped by clinical curiosity, scientific endeavor, career goals, clinical research, population health ideas and/or concerns for social good and equity. Not all GPs will have a special interest in this population. Effective GP engagement with the whole Chronic Care Model would be critical to success and sustainability. Engagement strategies would need to be evidence-based and congruent with Royal Australian College of General Practitioners (RACGP) and Royal Australasian College of Physicians (RACP) policy positions and clinical guidelines.

Common purposes and objectives

The co-design process for an area-based model would require preliminary decision making about the desired nature of coordinated and integrated paediatric health care; i.e. which services it would be desirable to link. In part this decision is theoretical. But co-design requires involving carers and young people in the decision making. Their vision of how preventive, integrated care would look to them is equally important. Evaluating carers' and young people's current experiences of navigating health services in the area, and their unmet healthcare needs will help shape common purposes.

Health and related services to maintain or improve children's health and functioning occur within a range of service types. From a child's perspective, the range of services required may change along a time continuum as the child develops from infancy to adulthood, as described in Table 7.

Table 7: Range of health service types commonly required by children from out-of-home care by ages and stages of development, drawn from author’s analysis of Australian and international research involving comprehensive health needs assessments.

Health service type	Pre-natal	Age 0-4	Age 5-12	Age 13-17	Age 18-21
Hospital in-patient services					
Hospital out-patient services					
Hospital emergency department					
General practice					
Mental health					
Alcohol & other drugs					
Relationships and sexual health					
Dietetics					
Dentistry					
Pharmacy					
Ophthalmology					
Audiology					
Intellectual disability services					
Specialist disability support services					
Emotional and behavioural health support services					
Physiotherapy					
Paediatric Specialist					
Speech Therapy					
Educational Psychology					
School Nursing					
Early Intervention					
Maternal & child health					
Obstetrics & gynecology					
Homeless outreach health services					

As health service types differ in terms of the age groups of children they cater for, purposes and objectives should also be specific about which age groups an area-based integrated model is intended to serve and the rationale and justification for this if it does not include all children from OOH. Linkages with the chosen services will become a priority issue in local systems development.

Once the health service mix has been identified, the level of desired integration; both short term and long term would need to be decided. While integrating health services is a common national and international goal, there are many different ideas about what integration means. Using a patient-centered perspective, integration can be understood as follows:

Integration is a coherent set of methods and models on the funding, administrative, organisational, service delivery and clinical levels designed to create connectivity, alignment and collaboration within and between the cure and care sectors. The goal of these methods and models is to enhance quality of care and quality of life, consumer satisfaction and system efficiency for patients with complex, long term problems cutting across multiple services, providers and settings. The result of such multi-pronged efforts to promote integration for the benefit of these special patient groups is called 'integrated care'.⁴⁴

Health service integration is not an all or nothing approach. Rather, it is likely to be pursued using a continuum of strategies to create varying degrees of integration. Current examples of the levels of integration applied to health services for children from OOH are shown in Table 8. Models range from centralised, single specialised clinics to comprehensive, state-wide managed care systems.⁴⁵

Superior Health is a managed care organisation which assures integrated, coordinated health care for all children from OOH in Texas U.S. and for care leavers up to the age of 21 year. Superior Health's *STAR Health Foster Care Health* program has one of the most developed integrated models in the U.S. An overview of the *Star Health* model illustrates the breadth and depth of issues encompassed in a complex system which has been regularly evaluated and reviewed and has participated in quality improvement processes since its establishment in 2008.⁴⁶

Integrated Healthcare Case Study

STAR Health provides coordinated physical and behavioural healthcare, dental, vision, pharmacy and allied health services, an electronic health record accessible to carers and health professionals, a 24- hour nurse helpline, medication review processes for psychotropic medications; on-line mental health resources and psychiatric hospital diversion programs for children from OOH.

⁴⁴ D.L. Kodner & C. Spreeuwenberg (2002) Integrated care: meaning, logic, applications and implications: a discussion paper. *International Journal of Integrated Care* 2(4).

⁴⁵ American Academy of Pediatrics (2018) Healthy Foster Care America (webpage) *Models of Care*.

⁴⁶ Texas Department of Family and Protective Services (2018) *STAR Health: A guide to medical services at CPS* (webpage) Austin, Texas, DFPS.

Table 8: Examples of various levels of integration in health service models for children from out-of-home care in Australia and the U.S.

Types of integration for children from OOHC	Illustrative examples
Integration of health service delivery points on a state-wide basis	The Department of Health and Human Services in Texas U.S. contracts a managed care organisation, Superior Health Plan, to provide a full range of healthcare services for all children from OOHC. Through its <i>Star Health Foster Care Health</i> program, Superior Health manages contracts with health professionals, financing, training, clinical guidelines, patient and carer education, systems monitoring and continuous quality improvement efforts. The Department of Health and Human Services contracts independent evaluations of the state-wide system performance.
Integration through inter-agency process modification	The NSW state-wide clinical guideline about child health assessment processes for health services to use at the area level. ⁴⁷
Service integration within a single facility	The Victorian government’s Latrobe Community Health Service Pathway to Good Health multidisciplinary clinic for children from OOHC. Operates 7 sessions per week. The clinic brings together a paediatrician, speech pathologist, psychologist, outreach nurse and OOHC health coordinator and provides comprehensive health needs assessment for all children 0-18 years entering OOHC in the area.
Multiple service integration for individuals by personal healthcare navigators or coordinators	Health and Education Assessment Coordinators in Victorian DHHS regions drive and monitor provision of health and education assessments for children in residential OOHC. ⁴⁸
Introduction of technologies aimed at aiding integration	Ventura County in California U.S. introduced a <i>Foster Health Link</i> website and mobile application in 2015 to enable foster carers to have more timely access to a child’s electronic health record which provides integrated health-related information from child protection authorities and state-funded health services. ⁴⁹

⁴⁷ NSW Health (2013) *Health assessment of children and young people in out-of-home care: Clinical Guideline*, Sydney: NSW Health

⁴⁸ Victorian government Department of Health and Human Services, (2017) *Human Services Policy and Funding Plan 2015-19, update 2017 – 18, Chapter 4, Activity Descriptions, Health and Education Assessments 31419*.

⁴⁹ Ventura County Human Services Agency (2015) *Foster Health Link*, Ventura CA, U.S.

Clearly some types of service integration involve much longer-term planning and investment than others. Developing common ideas about the types of integration that are desirable and feasible within an area model in both the short and longer term is therefore critical to determining the purpose and objectives.

Integrated Healthcare Case Study

Area-based models have been evolving under the National Health Service in England over the past 20 years. Currently Clinical Commissioning Groups in England have mandated responsibilities to ensure integrated area-based health services for children in statutory care. The recent annual report of the Camden Clinical Commissioning Group's health service for looked after children in central and north-west London provides a window into the current stage of development of such models.⁵⁰

In addition to regular health assessments and reviews for all children from OOHC, the Camden local authority area clinical activities include reducing the rate of teenage pregnancy in OOHC, monitoring children's sexual health, particularly among children at risk of sexual exploitation, addressing obesity, screening for substance misuse and the development of a clinical pathway for unaccompanied minors and refugee children.

Systems approaches

Community engagement system

The key system relating to this element of the Chronic Care Model is community engagement. Engagement systems have their own theoretical bases, practice principles and models.⁵¹ Familiarity with these can help organisational leaders select and describe appropriate engagement systems for their area-based model.

Developing clinical Health Pathways relies on effective community engagement. Using geographical service mapping as a base, existing care options are identified, along with transition points, provider roles and responsibilities and referral pathways. One goal of new Health Pathways is to identify service and referral gaps then invest or re-invest resources to address those gaps or improve patient experiences along the pathway.

⁵⁰ F. Croft, A. Adamo (2017) *Annual Report: Looked after children's health service Camden 2016/17*, London: Central and North West London, NHS Foundation Trust, Clinical Commissioning Group.

⁵¹ Clinical and Translational Science Awards Consortium, Community Engagement Key Function Committee, Taskforce on the Principles of Community Engagement (2011) *Principles of Community Engagement Second Edition*, National Institutes of Health Publication 11-7782, Washington D.C.: U.S. Department of Health and Human Services

Practice Example

The Health West Partnership conducted a project with area-based stakeholders to examine clinical pathways for young children requiring early intervention services across western suburbs in metropolitan Melbourne and make recommendations as to how service coordination could be improved in the future. This work provided the foundation for a Referral Decision Aid being developed and agreed between seven health service providers in the region.⁵²

Plant and equipment system

The second system which requires special consideration in community linkages is that of facilities, or physical settings of care. The desirability and greater effectiveness of co-located multidisciplinary health services for children from OOHC was a significant finding from the evaluation of area-based models implemented in New South Wales from 2010.⁵³ Most multi-disciplinary OOHC clinics in Australia are hospital-based, usually attached to a community paediatrics service. (Some are physically located in re-purposed off-campus hospital buildings such as a house owned by a health service). Staff working in these settings value the professional team environment that can be built, the opportunity to actively use both waiting areas and examination rooms as play areas for child observation, the chance to develop trusted relationships with carers and children over time and the ability to maximise children's physical safety through appropriate design and placement of furniture and equipment.⁵⁴

Negotiating co-location of specialist medical, primary medical and allied health services in a non-hospital setting such as a Community Health Service, along with provision of appropriate dedicated clinical spaces for paediatric patients may already be a fait accompli in some areas but not others.

There are U.S. and Canadian examples of family medicine clinics physically co-located with child protection services.

Practice example

A small study to evaluate a family medicine clinic co-located with the Children's Aid Society in a Canadian city identified advantages from child and carer perspectives. These included the provision of a dedicated 'medical home' which enabled continuity of primary care, a supportive and understanding environment for carers where the unique health challenges for children from OOHC could be freely admitted and discussed, and provision of a common, safe meeting area where all children from OOHC felt understood and welcomed, including those who had difficulties in regulating their behaviour. This clinic also provided a calm and neutral space where parents could attend their child's health appointments when appropriate, along with foster or kinship carers, facilitated by staff skilled and

⁵² S. Butzkueven (2017) *Pathways for children with developmental delays (PCDD) Project Report*. Footscray, Victoria. HealthWest Partnership.

⁵³ Nous Group (2014) op. cit.

⁵⁴ S.M. Webster (2014) op. cit.

experienced in establishing trust and protecting privacy. From a staff point of view, co-location facilitated face-to-face case conferences between health and child protection staff and improved both health record keeping and information exchange.⁵⁵

Measures and data

Local area service mapping is a critical first step towards a shared understanding of current paediatric health service capacity and coordination in the area. This includes information about health service organisations, health service sites, service types, health workforce, service capacity and service eligibility rules. A picture of organisations with capacity to commission or broker targeted services that children from OOHC may be eligible for is equally important. The Primary Health Networks for example have a role in commissioning integrated team care services for people from Aboriginal and Torres Strait Islander communities, young people's mental health services, psychology services etc. They may also provide direct and indirect support to health professionals in specific programs such as the new Doctors in Secondary Schools program.⁵⁶

Once the area service map is well understood the next step would be to identify which service types the new model is intending to integrate, including which service types are:

- beyond scope in an area-based approach,
- could be the target of short-term integration objectives e.g. multi-disciplinary services located within a single service
- could be the target of long-term integration objectives e.g. those requiring inter-agency agreement and systems development.

The third step would be to identify known service gaps and consider how new or re-configured services might be developed in the area to address those gaps. This step may require long-term objectives and incremental development work, especially where infrastructure, new workforce and other costs would be involved.

These decisions would then influence and indeed drive the extent and nature of community linkages which will be central to the area-based model. Executive agreement about common purposes and objectives may take some time to negotiate with leaders of different service types.

Direct linkages would also be needed with children from OOHC and their carers. One important integration measure is how children, young people and carers experience healthcare systems. A recently developed carer survey tool about children with special healthcare needs enables recording of caregiver experiences of health care access, communication with professionals, health care planning and other aspects of the healthcare quality.⁵⁷

⁵⁵ G. Swanson, M. Mills, A. Kittler, V.R. Ramsden (2016) Voices in the wilderness: colocation meeting the needs of children in protective care. *Canadian Family Physician*, pp.e694-e698.

⁵⁶ Victorian Government School Building Authority (2017) *Doctors in Secondary Schools Fact Sheet*, Melbourne: Department of Education and Training.

⁵⁷ S. Zaniel, H. Rosenberg, A. Bach, S. Singer, R. Antonelli (2016) Validation of a parent-reported experience measure of integrated care. *Pediatrics*, 138(6): e20160676.

Potential points of systems failure

Two of the common risks in building effective community linkages for children from OOHC have been placing an unwieldy burden on child protection case managers to negotiate with a complex health sector, and failure to effectively integrate the range of services children need. This can result in workforce frustration and children caught in relentless cycles of assessment and referral which do not lead to children receiving treatment.

Child protection case managers lack capacity

Meeting new expectations associated with healthcare systems reform may be a significant challenge for child protection authorities and child welfare agencies whose primary roles are in family liaison, case management, care planning, child support and advocacy. Differing degrees of health literacy and of knowledge about health-related needs in OOHC, coupled with overwhelming demands of child safety and child placement issues inhibit the development of effective collaborations with health professionals.

Policy and procedure gaps

Current procedures and practices at the interface between the child protection and health sectors may inhibit strong linkages. One example is the sharing of health information in the child's Essential Information Record (part of the DHHS Looking After Children case planning records system).

Practice example

The Essential Information Record (once completed) contains vital preliminary information that a doctor would require at the time of referral of a child for a health assessment. However, the DHHS Child Protection Manual does not appear to anticipate or outline efficient processes for sharing this information with a doctor.

Uptake of systems integration tools

Sub-optimal use of service coordination systems is a risk among family and children's services, particularly in relation to coordinating with general practice. Although tools are available to facilitate common assessments and patient information transfer between state-funded and other services, these have not been developed specifically for paediatric populations and uptake has been variable.⁵⁸

Exclusion of services from area-based models

Another common risk has been to exclude health service types such as specialist paediatric services, mental health or sexual health services from area-based models because they are siloed and difficult to integrate with primary health care. At the same time, Aboriginal community-controlled health services have sometimes been excluded, either unwittingly or because of differing cultural perspectives. However, such service types are important to children from OOHC and justification would be needed for not working on community linkages that could support inclusive long-term integration objectives.

⁵⁸ Victorian Government Department of Human Services (2015) *Service coordination survey, program report: Children youth and families*, Melbourne: DHHS.

Accountabilities

The Department of Health arm of DHHS and area-based health organisations would need to develop new executive and operational levels of accountability if sustainable area-based models of integrated health services for children from OOH are to succeed.

Critical questions

The following questions can assist those involved in co-design of a new area-based integrated healthcare system for children from OOHC to consider and discuss critical issues in relation to planning and developing community linkages.

- 2.1 Is further service mapping needed to support health systems design in your area?
- 2.2 What is known about the current expenditure from core budgets in state-funded health services on children from OOHC?
- 2.3 Who would lead and who would contribute to identifying new and/or additional funding opportunities for an area-based model and assure high-quality funding applications?
- 2.4 Who could be the fund-holder for an area-based integrated health service?
- 2.5 Are co-located services a feasible option in your area?

MODEL ELEMENT 3: DELIVERY SYSTEM DESIGN

OVERVIEW OF ELEMENT 3 FROM THE DHHS (2016) CARE FOR PEOPLE WITH CHRONIC CONDITIONS

GUIDELINE: DELIVERY SYSTEM DESIGN

Providing effective care requires a multidisciplinary team-based approach. Building effective teams includes:

- *defining and expanding roles and providing training to support role changes (Establishing multidisciplinary teams and key worker roles may require staff up-skilling to undertake a more generalist rather than disciplines-specific role. Practitioners in a multidisciplinary team need skills in supporting carer and child self-management, health care planning, initiating and facilitating case conferences and care coordination);*
- *developing trust and teamwork, including regular multidisciplinary team meetings to review care practices and caseloads and shared expertise;*
- *arranging work flows and allocating adequate time to support practitioners to provide coordinated and integrated care;*
- *including peer support workers as part of a multidisciplinary team with clearly defined roles and responsibilities*

All children from OOHC should have access to a comprehensive service delivery program that includes the following components:

- *child identification at initial intake/assessment*
- *agreed healthcare pathways*
- *standardised assessment*
- *standardised approach to healthcare planning*
- *review and recall systems*
- *multidisciplinary intra-agency and inter-agency healthcare plans*
- *healthcare coordinator*
- *health case conferences*
- *communication with other service providers*
- *discharge policies and procedures*

Common purposes and objectives

Delivery system design will hinge firstly on organisational vision about the degree of integration being sought, as discussed in Model Element 1. However, whichever degree of integration is chosen, an understanding of evidence-based professional policies and guidelines about clinical roles of doctors and other health professionals in the assessment, examination, diagnosis and treatment of children from OOHC is essential to the sustainable and effective design of health service systems. On the basis of more than thirty years of systems development, research and practice in England and the U.S. it is currently accepted best-practice that clinical systems should be actively led by the senior, most experienced specialist doctor available.^{59,60,61} While doctors with less experience in dealing with the

⁵⁹ Royal College of Nursing, Royal College of Paediatrics and Child Health, Royal College of General Practitioners (2015) *Looked-after children: Knowledge, skills and competences of health care staff, intercollegiate role framework*, March 2015, London: Authors.

⁶⁰ National Institute for Health and Care Excellence (2015) *Looked-after Children and Young People Public Health Guideline PH28*, October 2010, updated May 2015. London: NICE

⁶¹ Association of Maternal & Child Health Programs (2017) *Standards for systems of care for children and youth with special health care needs Version 2*, June 2017. Washington DC.

health effects of child maltreatment, nurse practitioners, nurses, and allied health professionals all have important roles to play, senior clinical oversight of both clinical systems and clinical work is strongly recommended. Professional medical colleges in Australia, England and the U.S. are agreed that multidisciplinary teams for children from OOHC should ideally be led by a paediatrician. In Australia, paediatricians who have completed advanced training in Community Child Health are those with specific training in child development and child protection and would be the most qualified to lead area-based teams.

A key purpose of any new area-based health care model could be to enable high-quality, clinically-led, integrated health education, health needs assessment and health treatment systems for children from OOHC.

Systems approaches

Workforce planning

The human resources system is central to delivery systems design. An evaluation of area-based health care models for children from OOHC implemented after 2010 in New South Wales recommended that specific human resources are required in both the child protection and health sectors not only to meet children's clinical needs but also to span the interface between the sectors at both executive and operational levels.⁶²

How roles are configured at managerial, operational and clinical levels requires careful planning. Past initiatives in Australia have been characterised by a tendency to underestimate the human resources required.

The recent inter-collegiate agreement between medical professional colleges in England clearly articulates five levels of health workforce competencies, as well as the functions and scope of specialised health workforce roles that are important in area-based models of health service delivery for children from OOHC.⁶³

Clinical example: Doctors for looked-after children

In the English health system, Named Doctors for Looked after Children are employed in each area. (children from OOHC are called Looked-after Children.) In addition to clinical work with individual children and their carers these doctors are involved in innovation in service design and strong collaboration with other stakeholders. In this capacity they are expected to take part in:

- **strategic planning;**
- **developing, implementing and reviewing policies, procedures and quality standards;**
- **monitoring trends, assessing the quality and appropriateness of referrals, identifying service gaps, duplication and blockages and acting to address these;**
- **attending strategy and planning meetings to provide expert assessment of health risk for children from statutory care and ensure effective multi-agency working;**
- **working on an inter-professional and inter-agency basis;**

⁶² Nous Group (2014) op. cit.

⁶³ RCN, RCPCH & RCGP (2015) op. cit.

- **identifying unmet health needs and gaps in service provision and promoting innovative service solutions;**
- **advising other agencies on appropriate healthcare for children from statutory care;**
- **applying lessons learned from audits, case management reviews and serious case reviews to improve practice;**
- **participating in and chairing multidisciplinary meetings.**

To develop and maintain expertise, medical colleges recommend that Named Doctors for Looked-after Children are employed in the role for at least 42 x 4-hour clinical sessions and 42 x 4-hour administrative sessions per year (seeing up to 4 children per clinical session). In addition, it is recommended that they be employed for a minimum of 1 x 4-hour session per week for every 400 children in statutory care in their area to enable them to provide staff training, supervision and audit functions.⁶⁴

Forming multidisciplinary teams

A system to support the formation and effective operation of multidisciplinary clinical teams is central in the Chronic Care Model. Area-based teams for children from OOHC may commonly include community paediatricians, general practitioners, dentists, psychologists, speech pathologists, child and adolescent nurses, audiologists, ophthalmologists and physiotherapists.

Teamwork can be defined as

*a dynamic process involving two or more health care professionals with complementary backgrounds and skills, sharing common health goals and exercising concerted physical and mental effort in assessing, planning or evaluating patient care*⁶⁵

A recent review of learning from studies about teamwork in primary health care in three countries sought to better understand the developmental process in achieving fully integrated teams.⁶⁶ The review identified four important dimensions of teamwork which appeared to be incremental, with structural and operational dimensions laying important groundwork for team development. These are described in Table 9.

⁶⁴ RCN, RCPCH & RCGP (2015) op. cit. p. 50

⁶⁵ A. Xyrichis, E. Ream (2008) Teamwork: A concept analysis. *Journal of Advanced Nursing*, 61: 232-41. P.238

⁶⁶ J.F. Levesque, M.G. Harris, C. Scott, B. Crabtree, W. Miller, L.M. Halma, W.E. Hogg, J.W. Weenink, J.R. Advocat, J. Gunn & G. Russell (2017) Dimensions and intensity of inter-professional teamwork in primary care: evidence from five international jurisdictions. *Family Practice*, pp. 1-10.

Table 9: Dimensions of multi-disciplinary teamwork in primary health care settings, summarised from J.F. Levesque et al (2017) *Dimensions and intensity of inter-professional teamwork in primary care: evidence from five international jurisdictions*, Family Practice, pp. 1-10.

Dimension	Key features
1. Structural dimension: legal status, team composition, location, technological support, funding.	<ul style="list-style-type: none"> • Co-location was crucial, particularly in the formative stages. • Capitation funding or blended remuneration were enabling factors. Funding over and above fee-for service enabled teams to invest in nursing hours, additional IT infrastructure and physical space. Fee-for service funding did not facilitate multi-disciplinary teamwork as there was no incentive for change.
2. Operational dimension: processes that governed care delivery, guidelines, protocols, directives, meetings, shared plans, formal routines.	<ul style="list-style-type: none"> • At the local level, coordination of care pathways and linkages with local community health centres and hospitals were considered crucial. • Guidelines and shared protocols, medical directives, screening protocols and health pathways had a positive impact. • Team meetings were less likely to be effective unless they had the culture of a clinical meeting and acceptable, accessible meeting places for clinical staff.
3. Relational dimension: professional and interpersonal patterns of the team including leadership and ownership, respect and trust, a sense of belonging, a team climate and establishment of informal routines.	<ul style="list-style-type: none"> • A loose federation of autonomous physicians was not conducive to the ongoing learning and sharing needed to improve systems and not likely to encourage health records sharing. • Active facilitation was required to create peer pressure, to model effective communication, encourage reflection, to champion respectful interactions, to guide reflective practice and to lead brainstorming activities. • Trust and power sharing are very slow to develop, especially among health professionals who are not co-located. This requires time and gradual familiarisation. • Team functioning can be helped by proactive work to develop shared team aims, investing in team-based training, and allowing time for facilitation and team-based activities e.g. learning collaboratives. People, resources and tools were all required to help a team form and integrate. • Psychological safety issues can occur when there is a large disparity of power among team members.
4. Functional dimension: the adaptability and integration of the team. This dimension relates to scope of practice, professional roles, shared values and goals, interdependence and complementarities.	<ul style="list-style-type: none"> • Effective teams need a shared vision of how an integrated team affects the patient experience. • Participatory decision may be more effective than the traditional hierarchy of medicine where the most highly qualified physician makes all final decisions and is not willing to share power. However, strong autocratic leadership can be positive if it is respected and provides assurance to team members. • Electronic medical records help to promote complementary roles • Effective teams have clear, measurable goals, clear division of labour, administrative and IT support and appropriate training.

Healthcare coordination

Care coordination is an essential element of the Chronic Care Model. High quality paediatric care coordination is a child-centered, assessment driven, team-based activity designed to meet the needs of children and young people while enhancing the capabilities of their caregivers. Care coordination addresses inter-related medical, social, developmental, behavioural, educational and financial needs to achieve optimal child health and wellness outcomes.⁶⁷ Healthcare coordination works across multiple care settings and individuals from different professions. Healthcare coordinators work on building and maintaining collaborative partnerships and developing and implementing shared care plans with all medical and non-medical providers.

Clinical example: Specialised OOHC nursing roles

The Royal College of Nursing in England has differentiated between two levels of nurses with specialised training and experience who contribute to health service coordination and integration. Designated Nurses for looked-after children operate at the most senior level, may be employed for a whole geographical area and have strategic, monitoring and quality assurance roles. They do not provide coordination for individual children.

Named Nurses for looked-after children are employed within an individual health service. They are the principal point of contact for local child protection organisations, carers and individual children. The Royal College of Paediatrics and Child Health recommends that at least 1.0 EFT Named Nurse be employed for each organisation which provides OOHC services and that the case-load for each Named Nurse does not exceed 50 children in OOHC. Administrative support of 0.5EFT is recommended for each 1.0 EFT Named Nurse position. Named nurses work closely with other health professionals and other health agencies to assure that individual health assessment processes are timely, robust and quality assured and that healthcare plans are developed and followed.⁶⁸

Healthcare coordination for children is essentially different to that for adults for five reasons:

- a) coordinators need to accommodate children's changing developmental ages and stages;
- b) children are dependent on adults;
- c) chronic disease has a differential epidemiology in childhood;
- d) diverse geographical patterns of diversity and adversity can impact on child health;
- e) funding streams and formulas differ between paediatric and adult health services.⁶⁹

⁶⁷ R.C. Antonelli, J.W. McAllister, J.P. Popp (2009) *Making care coordination a critical component of the pediatric health system: a multi-disciplinary framework*, Commonwealth Fund pub 1277, New York, The Commonwealth Fund p. 8.

⁶⁸ Royal College of Nursing Position Statement (2015) *The role of the Designated Nurse for Looked after children and the Named Nurse for Looked after children in England*, London: RCN

⁶⁹ American Academy of Pediatrics (2014) Family and patient-centered care coordination: A framework for integrating care for children and youth across multiple systems, Policy Statement. *Pediatrics*, 133 (5): e1451-1460.

Measures and data

Unlike Australia, there has been some progress in England and the U.S. in developing minimum datasets relating to health care needs and health service delivery for children from OOHC.⁷⁰ These include three broad categories of national data relating to:

- a) health needs assessments such as the percentage of children aged 0-4 years with up-to-date developmental assessment or the percentage of eligible children who have periodic emotional and behavioural assessments as well as physical examinations;
- b) the incidence of clinically diagnosed conditions and illnesses such as asthma, hearing impairment, delayed cognitive development, impaired vision or depression symptoms;
- c) healthcare receipt such as the primary place of health care, emergency department use, medications prescribed (e.g. psychotropic medications) or receipt of preventive health care such as vaccinations, relationships and sexual health education or dental examinations.

In the U.S. there is also an interest in data about health workforce activities and time involved in paediatric care coordination and the outcomes. A specific tool has been developed to enable this type of measurement after each type of coordinating activity by professionals from any health discipline.⁷¹ The data can be aggregated to enable calculation of real time costs (including those often not recompensed through fee for service). This data would support future health services planning and financing.

Measures across each of the categories described above would be appropriate to support monitoring and the ongoing quality improvement of an area-based integrated model. As little health service or clinical data is collected for the OOHC population in Victoria, new data systems would be needed in the health sector for area-based data collection and aggregation.

Potential points of systems failure

Evaluations of health service models in Victoria and other Australian jurisdictions identify points of potential failure of delivery systems design for area-based initiatives.

Inadequate resourcing for a comprehensive clinical pathway

A fundamental difficulty in Australian initiatives has been a failure to appreciate or adequately resource the coordination and integration needed to implement a comprehensive clinical pathway that incorporates ongoing cycles of healthcare for children from OOHC through their childhood and adolescence. These cycles are shown in Figure 5, which has been slightly adapted from the way a three-phase clinical pathway is described by the British Association for Community Child Health (2012).⁷²

⁷⁰ S.M. Webster (2014) Op cit. p. 20

⁷¹ Boston Children's Hospital. Care Coordination Curriculum (webpage) *Care Coordination Measurement Tool*

⁷² British Association for Community Child Health (2012) *The meaning of 'integrated care' for children and families in the U.K. Position Statement*. London: BACCH.

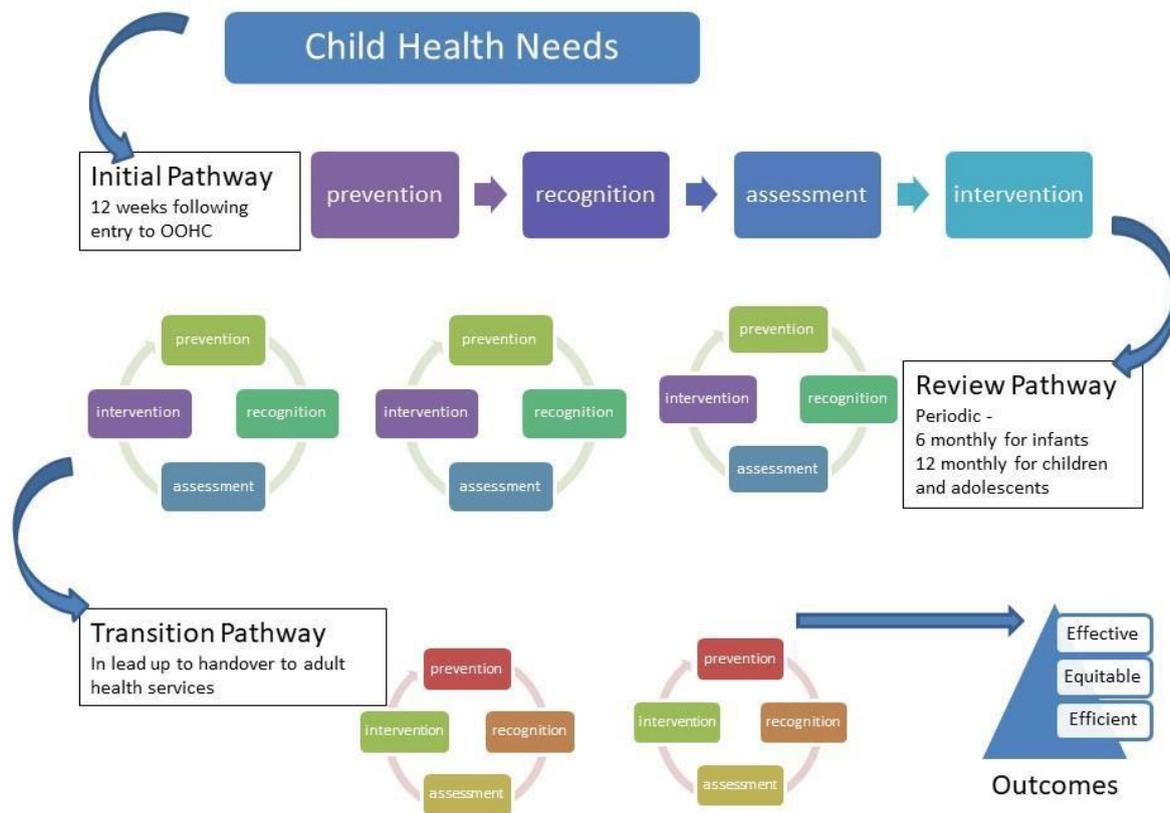


Figure 5: Clinical pathway for children from out-of-home care, as described by the British Association for Community Child Health (2012) *The meaning of integrated care for children and families in the U.K. Position Statement*. (Graphics slightly adapted by the author)

Learning from past Australian initiatives related to the clinical pathway for children from OOHC

Evaluation reports from past Australian initiatives have revealed the following resource-related point of potential failure in delivery systems.

- poor recognition that children from OOHC may have hidden or complex health care needs results in a failure to allocate resources to ensure referral for health needs assessment; the vital step which can establish children onto the pathway;
- failure to ensure clinical triage which effectively directs a child for appropriate initial health needs assessment services based on the child's age and stage of development, risk factors, location and any immediate health concerns;
- health assessment processes that do not include physical examination by a doctor and medical review of a comprehensive medical history;
- limiting eligibility for assessment and treatment coordination services to children entering OOHC for the first time;
- focusing health service resources on coordination between the OOHC and health sectors at the early steps in the initial pathway while failing to provide resources to ensure that interventions are delivered, or that the review and transition phases of a comprehensive clinical pathway are enacted.

Limiting the number of children from OOHC in scope

The tendency in Victorian initiatives over the past 15 years has been to limit which children were eligible to be involved, with the usual limits being either children entering OOHC for the first time and placed for a minimum of 12 weeks, or children in residential care placements. These limits appear to have been a demand management strategy.

Limiting eligibility to children entering OOHC for the first time has been problematic. The legal, case management and placement uncertainties which can surround the child for a prolonged period after first placement can severely hamper progression through the initial pathway illustrated in Figure 4 and tie up significant coordination resources. Longer-term strategic planning needs to take this into account while enabling equitable development of review and transition phases.

In any sustainable, integrated health system it would be important that all children in OOHC, as well as those on the edge of OOHC could benefit from healthcare coordination. It is past experiences of child maltreatment which are the health determinant. These coupled with the complexity of children's need for well-integrated social care and healthcare would be the factors that qualify these children for inclusion, not their status in the OOHC system.

Accountabilities

Clinical governance sits as the foundation of key accountability questions in health service delivery. Health service executive bodies have specific responsibilities for safeguarding standards of care, for credentialing the health workforce and ancillary staff, ensuring staff work within their scope of practice, setting appropriate clinical indicators, conducting clinical audits and developing systems for serious case review.⁷³ Ensuring child safety in health care settings, medical oversight of health assessment processes, and accountability for ongoing quality improvement in systems of care are especially important for children from OOHC, given their additional vulnerability.

The U.S. Association of Maternal and Child Health Programs recommends that individual children's requirements for health services should be interpreted within the context of professionally accepted paediatric practice.⁷⁴ In England, doctors are accountable for decisions about health service requirements for individual children in statutory care. Difficulties can arise when the care team responsible for decision making while the child is in OOHC override or ignore the clinical judgements which underpin health care planning.

In the present health service delivery system voluntary foster and kinship carers are heavily relied on to navigate the health system on behalf of children in their care, to physically transport children to medical appointments, to provide adequate health information to health professionals and to interpret and implement clinical advice. These roles are effectively delegated to carers who have organisational independence from DHHS. This means there is no apparent mechanism through which carers could be held accountable through DHHS, or even through CSOs for the way these tasks are carried out.

⁷³ Australian Commission on Safety and Quality in Health Care (2012) *Safety and quality improvement guide Standard 1: Governance for Safety and Quality in Health Service Organisations*, Sydney: ACSQHC.

⁷⁴ The Association of Maternal and Child Health Programs (2017) op. cit.

Critical questions

The following questions can assist those involved in co-design of a new area-based integrated healthcare system for children from OOHC to consider and discuss critical issues in service delivery systems.

3.1 To what extent do you agree that clinical leadership from experienced doctors is needed to inform and help drive health systems design for children from OOHC?

3.2 Are there existing multidisciplinary paediatric teams in the area? If not, what is the feasibility of developing one or more such teams?

3.3 Would it be feasible to co-locate services for children from OOHC in an area-based model?

3.4 To what extent do you agree that new, permanent, specialised doctor and nurse roles for OOHC would be desirable and feasible?

3.5 If an integrated system for coordinated healthcare was developed for the area, what steps would be needed to ensure that all children from OOHC could be catered for?

3.6 Is it feasible that children on the edge of OOHC (i.e. those receiving Child First services and those who have left OOHC) could also be catered for?

ELEMENT 4. SELF-MANAGEMENT SUPPORT

OVERVIEW OF ELEMENT 4 FROM THE DHHS (2016) CARE FOR PEOPLE WITH CHRONIC CONDITIONS GUIDELINE: SELF-MANAGEMENT SUPPORT

Effective self-management support helps children and their carers cope with the physical, social and psychological challenges of living with and managing the health impacts of child maltreatment. Health service processes and practices relating to supporting children to develop age-appropriate self-management capabilities include:

- *assess and document age-appropriate self-management needs;*
- *collaborate with the child and their carer in goal setting and decision making;*
- *provide the carer and child with an appropriate version of the health care plan;*
- *ensure skilled-practitioners use evidence-based approaches to provide self-management support e.g. incontinence nurse, paediatric sleep clinic, speech pathologist support with swallowing difficulties affecting eating;*
- *accommodate individual carer and child preferences - e.g. group support, online support, telephone support;*
- *provide information about credible on-line sources;*
- *link the child and their carer to condition-specific peer support groups to reduce sense of isolation e.g. CREATE Foundation, Foster Carers Victoria;*
- *take an organisational approach to health literacy; have a range of materials and formats for health information for carers and children from OOHC;*
- *assess health literacy and provide information and materials appropriate to health literacy competence;*
- *ensure multidisciplinary teams are sensitive to carer and child cultural beliefs, socio-economic circumstances and diverse needs;*
- *provide interpreters as needed.*

Care for people with chronic conditions guidelines adaptation

The above precis of this element has been adapted for OOHC from the DHHS (2016) Care for People with Chronic Conditions Guideline which was written for adults. Both children and their carers require ongoing support to enable children to gradually achieve age-appropriate health self-management skills over time. This element needs to be interpreted within a developmental context and with the expectation that periodic review, assessment and further intervention to enhance self-management as the child grows will be integral to this support.

Common purposes and objectives

Children from OOHC are at risk of missing out on early exposure to important health promoting behaviours. They may not have been taught things such as effective dental hygiene, healthy eating habits, skills for positive relationships or safe sexual health practices. Integrated health care models may include individualised health promotion in their vision, with objectives relating to children achieving age-appropriate health literacy across key areas of risk, including nutrition, tobacco, alcohol and other drugs, sexually transmitted diseases and teenage pregnancy.

In parallel, carer support to manage the health impacts of child maltreatment may be incorporated into the area-based model. The development of locally produced resources to assist carers and children to understand and more easily use area health systems is another worthwhile objective.

Systems approaches

Self-management support will involve several systems including those for:

- a) Clinical screening
- b) Clinical assessment
- c) Case planning
- d) Communications
- e) Community linkages

Screening and assessment tools can support systematic approaches to determining a child's current attainment of age-appropriate self-management and identify where interventions may be beneficial (e.g. managing incontinence, managing aberrant eating, managing poor sleep behaviours). Similarly, identifying where a carer may benefit from additional advice, information or services to help them help the child is important. Carers welcome screening tools which encourage and enable them to give voice to concerns in ways that provide re-assurance that unusual behaviours such as eating difficulties can commonly occur among children from OOHC.

Case planning which supports the development of self-management capabilities would incorporate preventive health services and health education within the child's health care plan. Ensuring that carers have written healthcare plans to follow, that the plans incorporate issues that are important to the carer and the child as well as those that involve prescribed treatments or other interventions recommended by health professionals can help to promote self-management.

Communication systems are critical within this element. With the child from OOHC in focus, communication systems that assure the quality and accessibility of communications from individual health services to these children and their carers are important.

Primary Health Networks in the North Division appear to have a strong interest in health literacy and may be important collaborators in projects to address this area.

Measures and data

A grounded appreciation of levels of health literacy among children from OOHC and their carers would be an asset in planning self-management support. Health literacy is the degree to which individuals have the capacity to locate, understand and apply basic health information to make appropriate health decisions. Literacy skills are a one component of health literacy. Critical thinking, problem solving, responsibility, productivity, self-directedness and effective communication skills are other important capabilities that a health literate child must develop, along with learning to read. Young people who are unable to comprehend what they read, and those who do not believe that their current actions can affect their health as an adult are less likely to be responsive or responsible in health self-management and are likely to have poorer self-reported health. Health literacy screening can measure knowledge and beliefs about health and indicate where interventions may be helpful.⁷⁵

Caregivers and health professionals are the two most common sources young people trust for health information. Research led by Dr Rachael Cox from Deakin University highlighted the benefit of measuring health literacy not only among young people but also among their carers. The study found that knowledge among residential care staff about guidelines on healthy physical activity, nutrition and sedentary behaviours was less than adequate, given their role in the everyday care of young

⁷⁵ S.L. Brown, J.A. Teufel, D.A. Birch (2007) Early adolescents' perceptions of health and health literacy. *Journal of School Health*, 77; 1, pp. 7-15.

people in OOHC.⁷⁶ This would impact on their capacity to support improved health outcomes for children with nutritional or growth issues.

Other self-management measures address medical management such as safe use of medicines, symptoms management such as chronic stomach pains or headaches, and the impact of health issues on school attendance, sleep, sport and play or other activities of daily life.

Potential points of system failure

Children not provided with ongoing support to develop self-management capability

Self-management support systems have not been so well developed in paediatrics as in adult health services. There is a tendency for such support to be a one-time event, provided in a time of stress and with little reinforcement.⁷⁷ One caution about self-management is the risk of expecting too much too quickly, without taking sufficient account of a child's age or stage of development (especially in the case of developmental delay) or of the complexity that carers are dealing with.

Low health literacy not recognised or accommodated

Failure to recognise low health literacy can impact on both engagement with health services and a child and/or carer's ability to benefit from interventions. Understanding the purposes of asthma medicines or psychotropic medicines for example, how they work and when to use them is one area where this is particularly important. The purpose and benefits of comprehensive health assessments for children from OOHC are not always evident to carers and may require appropriate explanation. Helping young people to independently find GP services where they will feel comfortable, or when to use emergency services or seek mental health advice require teaching and learning over time.

There is a paucity of specific materials in Victoria for foster and kinship carers or young people leaving OOHC which present easily accessible information about health services and how to navigate health systems. The American Academy of Pediatrics provides several resources for foster carers which could be adapted for local use.⁷⁸

Accountabilities

The Victorian government's strategy to develop preventative, integrated health systems for vulnerable children strengthens an authorising environment that already enables community health services and other state-funded health programs to be proactive in better provision of initiatives for OOHC that can support and enhance children's and carers' health literacy capabilities.

⁷⁶ R. Cox, H. Skouteris, M. Fuller-Tyszkiewicz, A.D. Jones, D. Gallant, S. Omerogullari, R. Miller, L.L. Hardy (2015) Descriptive study of carers' support, encouragement and modelling of healthy lifestyle behaviours in residential out-of-home care. *Australian and New Zealand Journal of Public Health*, 39(6), pp. 588-592.

⁷⁷ K.M. Holly, E. Henry, L. Schor (2015) Supporting self-management of chronic health problems. *Pediatrics* 135(5), pp.789-792.

⁷⁸ American Academy of Pediatrics (2018) *Healthy Foster Care America, Primary Care Tools*(webpage).

Critical questions

The following questions can assist those involved in co-design of a new area-based integrated healthcare system for children from OOHC to consider and discuss critical issues in systems to enhance child and carer self-management.

4.1 To what extent can staff time and other resources be re-allocated to provide comprehensive, planned self-management support for children from OOHC and their carers?

4.2 Are there particular population health issues that should be the early focus of local self-management initiatives? e.g. asthma management, sexual health

4.3 Will staff upskilling be required in paediatric self-management support strategies and interventions?

4.4 How will child and carer self-management support services be funded?

MODEL ELEMENT 5: DECISION SUPPORT

OVERVIEW OF ELEMENT 5 FROM THE DHHS (2016) CARE FOR PEOPLE WITH CHRONIC CONDITIONS

GUIDELINE: DECISION SUPPORT

Effective healthcare for children from OOHC requires that care that is planned and delivered consistent with evidence-based guidelines. This means organisations should:

- *plan delivery processes consistent with evidence-based guidelines;*
- *support practitioners with ready access to evidence-based guidelines, and provide professional development opportunities to ensure staff have sound and current knowledge of management recommendations;*
- *have systems and protocols in place with other services and program areas to support access to or complement specialist services. (Examples include working with acute services to have outreach specialist services within community health services, providing staff with access to secondary consultation from experts such as mental health, drug and alcohol or refugee health specialists, or working with other health services such as general practice or acute services to identify how community health services can be embedded in their care pathway;*
- *develop condition-specific protocols and care pathways with other care providers in the region to support clients receiving care from the most appropriate service for their needs;*
- *work with other service providers to develop care pathways that support young people transitioning from child-specific services to adult services;*
- *have routine clinical audit and review processes in place to monitor adherence to agreed practice and protocols.*

Care for people with chronic conditions guidelines adaptation

While planning and delivery of evidence-based coordinated care is at the heart of the Chronic Care Model a further consideration in designing any model might how the model should respond to other important guidelines such as those related to children's healthcare rights.

The United Nations Convention on the Rights of the Child (1989) outlines children's inalienable right to special safeguards and care, to special protection and assistance by the state when their parents are unable to care for them, and to the highest attainable standard of health. Article 39 of the Convention provides that states parties shall take

all appropriate measures to promote the physical and psychological recovery and social reintegration of a child victim of any form of neglect, exploitation or abuse...⁷⁹.

While the Convention has no force in law in Victoria, it provides ethical guidance, it enshrines the 'best interests of the child' as the guiding principle and it articulates children's rights to recovery.

The Charter for Children in OOHC developed in 2007 by Victoria's Child Safety Commissioner recognises children's right to stay healthy and well and to go to a doctor, dentist or other professional for help when needed.

⁷⁹ United Nations Office of the High Commissioner for Human Rights (1990) *Convention on the Rights of the Child, Adopted and opened for signature, ratification and accession by the General Assembly resolution 44/25 of 20 November 1989, entry into force 2 September 1990 in accordance with Article 49.*

A Charter of Rights of Children and Young People in Healthcare developed by Children's Hospitals Australasia⁸⁰ provides guidance about age-appropriate ways to ensure children can have their voices respected in health care settings.

Area-based health services may strive to build integrated systems that specifically reflect and enact healthcare-related rights for children from OOHC.

Common purposes and objectives

Clinical decision support provides health professionals with knowledge and person-specific information that is filtered or presented at appropriate times to enhance the efficiency and effectiveness of decision making in clinical care. The knowledge that children should receive two doses of human papillomavirus (HPV) vaccination at age 12-13 years can, for example be matched with person-specific information on the Australian Immunisation Register to indicate whether an individual child has been vaccinated on time or not. A decision support tool can send an automatic reminder to the child's parent or doctor to alert them that the child's immunisations are due or are not up to date.

Decision support tools are used to avoid or minimise errors or adverse events, maximise efficiency and cost-benefit, assure the quality of care, improve clinician and patient satisfaction and enhance children's health outcomes. Tools include clinical guidelines, directions or directives about specific health conditions, diagnostic tools, documentation templates and evidence-guides such as a guide to which interventions are known to be effective for children from OOHC with mental health conditions. These tools are generally designed to be readily available from the health professional's desk, while they are seeing a child or carer. Health information technologies increasingly provide a platform for doctors to access decision support tools quickly and effectively.

Examples of decision support tools that might be rapidly implemented on an area basis include:

- i. Routine use of the Commonwealth Department of Health Clinical Assessment Framework for Children and Young People in Out-of-Home Care.⁸¹
- ii. Systematic monitoring of data on the Australian Immunisation Register to confirm immunisation status for children in OOHC.
- iii. Development of a local clinical Health Pathway for children from OOHC screened using a Strengths and Difficulties Questionnaire (SDQ) as being at moderate or substantial risk of mental health problems.

⁸⁰ J. Thompson & J. Murphy (2011) *Report on Children's Hospital Australasia (CHA) project on the rights of children in healthcare*, Sydney, Children's Hospitals Australasia.

⁸¹ Australian Government Department of Health (2011) *National clinical assessment framework for children and young people in out-of-home care*, Canberra, DH.

Systems approaches

Clinical decision support tools are an increasingly common feature within clinical care systems.

Evidence guides from England and the U.S. which specifically address children from OOHC can help inform both the design of local decision support tools and health services design.^{82,83,84}

At the area-level Health Pathways are an approach now widely used in Victoria to provide GPs with desktop information about local service referral pathways as well as assessment tools and management guides for common conditions. Victorian Primary Health Networks in collaboration with the Royal Children's Hospital are leading the development of several local paediatric Health Pathways tools and could be important collaborators in tailoring tools for children from OOHC.

For children and young people in OOHC it is important that health services can respond appropriately to the potential impacts of the traumas associated with child maltreatment. Guidance is available for health services from bodies such as the American Academy of Pediatrics and the Centre for Health Care Strategies on the basic requirements of trauma-informed care⁸⁵ and on good practice in developing trauma-informed health services. This includes close attention to aspects such as training for clinical and non-clinical staff, creating safe, non-threatening clinical environments and screening paediatric patients for past trauma exposures.^{86,87}

Decision support example -Medication management

Medication management for children from OOHC is an area which has attracted significant attention in the U.S. after research raised quality and safety concerns about the rates of prescribing of psychotropic drugs. Decision tools have been developed for doctors and for case managers and carers about the use of psychotropic medications^{88,89,90}

⁸² National Institute for Health and Care Excellence (2015) *Looked-after Children and Young People, Public Health Guideline PH28*, October 2010, updated May 2015. London: NICE.

⁸³ American Academy of Pediatrics Committee on Child Abuse and Neglect and the American Academy of Pediatric Dentistry (2010) *Guideline on oral and dental aspects of Child Abuse and Neglect*. Washington DC: AAPD.

⁸⁴ J.A. Adams, N.D. Kellogg, K.J. Farst, N.S. Harper, V.J. Palusci, L.D. Frasier, C.J. Devitt, R. A Shapiro, R.L. Moles, S. P. Starling (2016) Updated guidelines for the medical assessment and care of children who may have been sexually abused. *Journal of Pediatric and Adolescent Gynaecology*, 29(2): 81-87.

⁸⁵ American Academy of Pediatrics (2018) *Healthy Foster Care America Trauma Guide* (webpage).

⁸⁶ M. Schulman & C. Menschner (2018) *Laying the groundwork of trauma-informed care*. Hamilton NJ, Centre for Health Care Strategies.

⁸⁷ C. Menschner, & M. Maul (2016) *Key ingredients for successful trauma-informed care implementation*. Hamilton NJ, Centre for Health Care Strategies.

⁸⁸ Texas Department of Family and Protective Services, and University of Texas at Austin College of Pharmacy (2016) *Psychotropic medication utilization parameters for children and youth in foster care, March 2016*. Austin Texas, DFPS.

⁸⁹ U.S. Department of Health and Human Services, Children's Bureau (2015) *Supporting youth in foster care in making healthy choices*, Washington DC: Author

⁹⁰ American Academy of Child and Adolescent Psychiatry (2012) *A guide for community child-serving agencies on psychotropic medications for children and adolescents*, Washington DC, AACAP.

Measures and data

Useful monitoring measures related to health service delivery could include:

- details of existing decision support tools incorporated into the model;
- new decision support tools developed for implementation within the model;
- health professionals' fidelity in the use of such tools and the extent of uptake;
- the impact of using decision support tools on processes for care for individual children from OOHC e.g. receipt of psychological services, or of catch-up vaccinations.

A second category of measures relate to children and carers. Screening tools that measure health-related quality of life can provide valuable information to inform healthcare planning. An Australian study found that dealing with children's health needs in OOHC has a similar impact on carers as that of caring for a child with cystic fibrosis, juvenile diabetes or chronic asthma.⁹¹

Potential points of systems failure

Complexity of clinical decision making under-estimated

From a medical point of view, sophisticated and complex clinical decision making is involved at each step of health care for children from OOHC, from triage to care planning to treatment to review. Models which do not recognise this complexity have proved difficult, even impossible to enact.

Clinical care primarily involves the complex use of clinical judgement and acumen, intermingled with the impact of personal interactions within a therapeutic relationship with the child and their carer. Clinical decision supports can aid but not substitute for clinical judgement. Engaging doctors and other health professionals in the use of such aids involves respectful communication, clinical leadership and drive, deliberate implementation strategies, integration into existing workflows, training and support as well as monitoring and evaluation of their usefulness. Collaboration and partnerships with other agencies would be needed to attract shared interest and investment in identifying and implementing decision support systems for an area-based model.

Breadth of decision support tools needed

To date there has been a strong focus in Victorian health system initiatives on children entering out-of-home care for the first time or those who have significant emotional and behavioural difficulties. Health-condition or age-specific decision support tools are still to be implemented for children from OOHC with particular needs such as those who repeatedly present for non-urgent conditions in emergency department, those with allergies, asthma, incontinence, teenage pregnancy, sexually transmitted infections, eating disorders or self-harming behaviours. Unless an area-based model aims to develop service systems for all children from OOHC it is unlikely that health service planning would become this advanced.

⁹¹ J. Carbone, M.G. Sawyer, A.K. Searle, P.J. Robinson (2007) The health-related quality of life of children and adolescents in home-based foster care. *Quality of Life Research*, 16, pp. 1157-1166.

Accountabilities

The governing body for any area-based models would need to be responsible for developing a quality framework and defining the quality of services that an integrated area-based model aimed to achieve, aligned with the overall purpose and objectives of the model. Oversight from a Clinical Quality and Risk Management committee or a similar body could strengthen clinical governance.

Executive and operational roles and accountabilities for leading and assuring safety and quality of clinical services for children from OOHC would need to be clearly documented in participating health services. Policies, procedures, staff position descriptions and decision support tools could all be designed to support safe, quality care.

Critical questions

The following questions can assist those involved in co-design of a new area-based integrated healthcare system for children from OOHC to consider and discuss critical issues in decision support.

5.1 To what extent do you agree that enabling children's healthcare-related rights would be an important underpinning for your area-based model?

5.2 Are existing outreach specialist services located in community health services adequate to provide secondary consultation for complex cases?

5.3 What and where are the capacities and processes for developing new clinical pathways and other decision support tools?

5.4. Is there an existing clinical governance group who could perform this function for a new area-based integrated care system?

5.5 Is there existing capacity and capability to conduct clinical audits and reviews in relation to processes of care that children from OOHC receive currently in state-funded health services? If not, what steps would be needed to make these feasible?

MODEL ELEMENT 6: CLINICAL INFORMATION SYSTEMS

OVERVIEW OF ELEMENT 6 FROM THE DHHS (2016) CARE FOR PEOPLE WITH CHRONIC CONDITIONS GUIDELINE: CLINICAL INFORMATION SYSTEMS

Efficient and effective care requires clinical information systems that organise individual and population data and support sharing of data with other care providers. Community health services should have a clinical information system that supports:

- *development of a common and shared health assessment and healthcare plan;*
- *routine reminder and recall mechanisms;*
- *secure communication with other providers;*
- *capacity to share/develop healthcare plans with other organisations;*
- *organisation of individual and population data- including a range of health and social indicators that allow the organisation to identify and respond to changing and emerging local issues and sub-populations who experience poorer health e.g. infants in OOHC who fail to thrive, children in OOHC with poorly controlled asthma, homeless care leavers;*
- *provision of data on care delivery to support ongoing service mapping and program monitoring, reporting and evaluation.*

Common purposes and objectives

Children from OOHC are in the unique situation of being largely dependent on caregivers other than their parents to be firstly the holders of important data about each child's health history and secondly the key informants to health professionals. The first purpose of any area-based integrated clinical information system must be to put mechanisms in place to enable the critical functions of collecting, holding and sharing child health information to be carried out efficiently and effectively.

A child's health history is the starting point for productive medical consultations. From a medical point of view a health history is a narrative of past events and circumstances that are or may become relevant to a child or young person's current or future state of health. A comprehensive health history comprises a set of information, usually presented in chronological order, which includes:

- a) biographical information including date of birth, Medicare Number etc.;
- b) a genogram;
- c) the health of parents and other close relatives;
- d) perinatal experiences, growth and progress towards developmental milestones;
- e) illnesses, injuries and health conditions such as allergies or impairments;
- f) health care interventions including hospitalisations, immunisations, medications, dental care, pathology or x-ray results, screening tests, investigations, treatments or therapies;
- g) current signs or symptoms of health difficulties, with or without diagnoses;
- h) impacts of health difficulties on daily activities including eating, sleep, physical activity, play, communication or learning;
- i) aids and appliances required such as eyeglasses, hearing aids or mobility aids.

Details of exposure to neglect and/or abuse including the child's age when exposed, duration of exposure, and types of abuse experienced, form part of a child's health history and provide vital information for health professionals.

Systems approaches

National clinical quality and safety standards recommend that accurate, integrated and readily accessible child health records that document all aspects of a child's health care should be available to health professionals. Records systems should also be designed to enable systematic audit against quality standards.

A clinical record is a documented account of a person's health, illness or treatment in hard copy or electronic format. It is a tool for planning provision of health care and for contemporaneous tracking of the patient's condition, care, services and interventions performed by the care team. The clinical record allows for the transfer of important clinical information between healthcare professionals. Further, it creates an historical record of the care provided to the patient for later use for a variety of clinical, quality, audit and research purposes. It is also a potentially rich source of information about safety and quality of care that can be used to improve clinical and organisational systems, and for research.⁹²

The national *My Health Record* digital records system being implemented by the Australian government could provide a future platform for integrating clinical information for each child from OOHC. Adults with parental responsibility for a child can apply for a child to be registered for a *My Health Record*. However, uptake of this system has not yet reached a critical mass. By January 2018 less than 40% of Australians aged under 20 years had been registered.⁹³ Primary Health Networks could be important collaborators in innovative measures to move clinical records for children from OOHC into this system as it expands and improves in the future.

A fully integrated system between the OOHC and health sectors for health needs assessment, healthcare planning and healthcare delivery for each child would be highly desirable following the pathway described earlier in Figure 4. This would require significant changes in current policies and procedures.

Any effective system for medical assessment of children's health status depends on effective and efficient systems for ensuring that children are referred or taken for assessment and treatment. This falls to those with roles in statutory care and is not necessarily their current priority. Approaches which involve OOHC authorities regularly and routinely notifying area health bodies about all children entering OOHC, all placement changes and all exits from OOHC have been demonstrated to be more effective and to increase accountability when compared to discretionary arrangements. OOHC Health Coordinators in the health sector and OOHC Health Liaison Officers in the child protection sector can support effective child registration and referral processes.

Systems to enable secure communications between health services are technically possible although uptake and integration of such systems is still developing. The Murray Valley Primary Health Network has identified, for example, that although more than 95% of general practices in their catchment are computerised, only a small percentage are using electronic messaging to transfer clinical information to other providers, despite having the technical capacity to do so.⁹⁴

⁹² Australian Commission on Safety and Quality in Health Care (2012) op. cit. p.30

⁹³ Australian Government, Australian Digital Health Authority (2018) *My Health Record Statistics – 28 January 2018* (webpage) Canberra: ADHA.

⁹⁴ Murray Valley Primary Health Network (2017) *Health assessment 2016-17*, Bendigo, MVPHN.

Although routine recall and reminder systems are common in general practice and other health services their effectiveness depends on children being registered with that service. The transient nature of the OOHC population indicates that these functions would need to be centralised within the area health system, as they are in England and the U.S. Area-based health navigators such as OOHC Health Coordinators use child health register, recall and reminder systems to monitor individual children's receipt of preventative health, health assessment and treatment services over time and place.

An area-based system to collect, store, de-identify, aggregate and regularly provide complex data on child health in the OOHC population would need to be built. Current systems do not perform this function at the level necessary for service planning.⁹⁵

Measures and data

A well-integrated health system would use a variety of measures to monitor the extent, quality and accessibility of individual and population level health data about children from OOHC. These might include:

- The extent to which all children from OOHC were appropriately registered with area-based integrated health systems;
- The availability and accessibility of comprehensive child and family health histories for each and every child from OOHC;
- The health service needs of the population of children on the edge of, living in and having left OOHC in the area;
- The availability of appropriate health services to meet those needs;
- The extent to which children received health services identified in healthcare plans in a timely way and of appropriate quality.

Potential points of systems failure

In the health sector, clinical information about children is first collected at the point of referral to a health service or a first request for service. The usual informant is the child's parent. The complexity of collecting, recording and sharing child and family health histories for children from OOHC between the health and child protection sectors has been one of the fundamental tipping points in limiting the success of past initiatives.

Health information recorded prior to a child requiring OOHC not shared

Many families whose children are placed in OOHC may receive child and family services through a range of state-funded services. These services are required to collect and register standardised information about concerns for parent and child health.⁹⁶ Although a suite of service coordination tools and templates are available for use by state-funded services which can theoretically support the collection and transfer of health information in a standardised way across services in Victoria these were not designed specifically for children. Uptake appears sub-optimal, particularly at the interface between state-funded services and general practice.⁹⁷

Risk assessments in the investigation and substantiation phases after a child protection report could also bring together and analyse health-related information about parents and children in the child

⁹⁵ Victorian Government Auditor-General (2015) op. cit.

⁹⁶ Victorian Government Department of Health and Human Services (2018) *Integrated Reports and Information System (IRIS)*. Melbourne: DHHS.

⁹⁷ Victorian Government Department of Health and Human Services (2015) op. cit.

protection sector, including those not using state-funded services. Does this information necessarily follow a child into OOHC?

Health information not shared at the time of a referral for OOHC placement

When a child is found to need OOHC a formal placement referral may be made to a Placement Coordination Unit in DHHS, and in some cases then to a community service organisation. The proforma referral form makes provision for passing on demographic information about the child, including any past statutory care history, and a range of health-related information in free text including:

- Medicare number;
- Health care card number;
- health alerts and any required management or treatment;
- health conditions and disabilities; details of any conditions, the age at which these were identified and whether they are ongoing;
- health conditions likely to require medical or dental appointments within 2 weeks of placement;
- current treatments including medications;
- specific dietary requirements;
- current use of aids or appliances;
- outstanding medical or dental appointments;
- any concerning behaviours; including triggers, frequency and management;
- the names, role and address of other professionals involved in the past and currently.⁹⁸

This referral information may be used by an OOHC case manager to populate an Essential Information Record (EIR) for a child as part of the Looking After Children (LAC) records system in foster care. If complete, this could provide adequate information for a health professional assessing a child for the first time, provided it was made available to them. However, while it is expected that the EIR will commence within 2 weeks of entry to OOHC it is intended to be a cumulative record completed over time 'as information becomes available'. It is also likely that neither the person making the referral to OOHC nor the OOHC Case Manager will be health professionals. This may affect the quality and completeness of health information collected, recorded and shared.

These referral forms and the LAC records system do not apply to children in kinship placements, nor does the LAC system apply to children in permanent care placements. The policies and processes for exchange of health information about children in these types of placements seem less clear.

Insufficient health information sharing outside of OOHC

A multi-jurisdictional analysis of legislative provisions for sharing personal information about children in child protection services in Australia found that overly centralised control could be a barrier in Victoria.⁹⁹ The DHHS *Child Protection Manual* appears restrictive in authorising child protection staff to use and disclose personal and health information outside of the 'care team'.¹⁰⁰ The OOHC care team includes child protection practitioners, CSO staff, residential care staff, home-based carers, parents and significant others. Although care team members are expected to consult and work closely with health professionals, doctors and other health personnel are not formally recognised as members of

⁹⁸ Victorian Government Department of Health and Human Services (2018) *Child Protection Manual: Principle roles and responsibilities for placement*. Melbourne, DHHS.

⁹⁹C. Adams, K Lee-Jones (2017) Sharing personal information in the child protection context: impediments in the Australian legal framework, *Child & Family Social Work*, 22, pp. 1349-1356.

¹⁰⁰ Victorian Government Department of Health and Human Services (2018) *Child Protection Manual: Our approach – information sharing in OOHC*. Melbourne, DHHS.

the 'care team'. As a result, they may be excluded from information sharing, or staff may feel uncertain about passing information on to them. Child protection practitioners are expected to satisfy themselves in respect to ten separate and complex considerations relating to the use and disclosure of information about a child.

The stated principle is that:

information should be disclosed within the care team, to the extent that it is necessary for the good care of the child and should be shared beyond the care team only when lawful to do so, appropriately authorised and required to ensure the best interests of the child.

Furthermore:

Child protection is obliged to take reasonable steps to ensure that personal and health information is disclosed only to those individuals who require it to meet their responsibilities with respect to the care and best interests of a child, and that those individuals and services to whom information has been disclosed protect the information and do not disclose it to others unless authorised to do so.

If staff feel uncertain about the balance between disclosure and privacy, they are advised to consult DHHS Legal Services or a divisional or central privacy officer.

Evaluation and research studies consistently report that essential health-related information has frequently not been provided to health professionals engaged in either initial or comprehensive health assessments. This presents a major barrier for doctors.¹⁰¹

Doctors, nurses, psychiatrists and psychologists have the status of Information Holders under the Victorian Children and Young Person's Act 2005. They can be compelled to disclose information to child protection but do not appear to be necessarily entitled to receive information.

Clinical Information Systems Analysis Example- Loddon-Mallee Areas

A small Victorian Public Service Graduate Recruitment and Development Scheme graduate learning team project in the Loddon and Mallee areas in 2015¹⁰² investigated stakeholder experiences and views around the ways in which child health histories were collected, recorded and shared in OOHC. The project team uncovered important weaknesses including lack of a shared understanding about the need for health records or the nature of information required, lack of administrative capacity to manage child health records efficiently in OOHC, uncertainty about authority to share health information, poor integration of diverse record keeping systems among different agencies and weak agreement about respective roles and responsibilities among stakeholders. Clinical governance systems appeared to be missing.

¹⁰¹ S.M. Webster (2014) op. cit.

¹⁰² C. Kell, M. Kumar, M. Lin, K. Meeuwssen, E. Morrisey (2015) *Communication that Counts: The importance of comprehensive health histories for children and young people in out-of-home care*. Graduate Learning Team Report, Victorian Public Service Graduate Program, Melbourne: DHHS.

Specific recommendations for area-based systems improvement included formation of an area-based multi-disciplinary working group to:

- *develop consensus around what constitutes a comprehensive child and family health history for a child for OOHC;*
- *advise on the development of improved systems for the collection, storage and sharing of child health information in OOHC;*
- *review and recommend improvements in the way roles and responsibilities for child health information management are assigned;*
- *develop a quality improvement framework which incorporates auditing, monitoring and evaluating clinical information systems for children from OOHC.*

The team also recommended the development and periodic delivery of inter-sectoral, inter-agency and interdisciplinary professional development on the health impacts of child maltreatment.

Population health data collected in the child and families services sector not available to health professionals

Important information about health concerns in a child's family may be collected as part of needs assessment and service planning across a range of state-funded services including:

- family services,
- family violence services,
- sexual assault report services;
- maternal and child health enhanced home visiting services;
- early intervention services;
- early parenting center services;
- cradle to kinder services;
- youth services.

State-funded services contribute monthly data to a state-wide data set (which includes child protection status) through a DHHS Integrated Reports and Information System (IRIS). This system can be interrogated to draw family profiles which describe concerns recorded and services provided for parents and all children within individual families. Although some children from OOHC or their parents may not have received state-funded services prior to the child entering care this aggregated, de-identified data could potentially still provide valuable information for health service planning.

Population health data not collected in OOHC

If children had their health status and health needs systematically assessed and reviewed as the Chronic Care Model envisages, then comprehensive data from individual case files could be de-identified and collated to inform ongoing, area-based population health needs analysis. A new data collection and monitoring system would need to be developed to enable this.

Accountabilities

Existing accountabilities for how child health information is collected, verified, stored and shared in OOHC would need significant revision. Health professionals are seriously hampered within the present system. One longer-term solution may be to shift the child health information system out of the child protection sector and into the health sector as has been achieved in England. In the shorter term new procedures would be needed to set out how child health information can be better established for kinship and permanent care placements and improved for foster care placements.

Critical questions

The following questions can assist those involved in co-design of a new area-based integrated healthcare system for children from OOHC to consider and discuss critical issues about clinical information systems.

6.1. How feasible would it be to register children from OOHC onto the Australian My Health Record digital health system in your area?

6.2 Who is available in your area to support the development and sustainability of robust clinical information systems for children from OOHC?

6.3 How could operational role descriptions be modified, and/or staff positions be created to assure that people responsible for clinical information systems had the necessary competencies for those roles?

6.4 How could the barriers to disclosing child health information be addressed for child protection professionals, community service organisation staff, residential care staff, foster carers and kinship carers as well as health professionals?

6.5 What short-term and longer-term changes are needed to existing policies, procedures and guides to better support efficient and effective health and social care systems integration?

CONCLUSION

Over the next 10 years coordinated efforts would be needed across the health and child welfare arms of the Victorian government Department of Health and Human Services if the government's strategic goal for preventative and integrated health systems for vulnerable children from OOHC is to be realised.

This would require new visions, joint authorising and strong inter-sectoral governance arrangements, including close attention to clinical governance systems. Currently accepted guidelines for the care of people with chronic conditions provide a suitable framework for area-based model development. A theoretical, three-phase clinical pathway is agreed among health professionals and can form the basis for development of localised versions.

Incremental initiatives, projects and approaches which can build towards a fully integrated system are feasible at the area-level given the existing authorising environment.

The development of sustainable area-based models would entail ongoing learning and development across the executive, clinical, operational and voluntary levels of the workforce in OOHC.

Serious weaknesses in current clinical information management systems for children from OOHC could be addressed by moving these systems across to the health sector. This could not only pave the way for improved information management for individual children but also create a platform for developing 'big data' about this vulnerable population, their health status, health needs and use of health services.

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