The RICHER Social Pediatrics Model: Fostering Access and Reducing Inequities in Children's Health

M. Judith Lynam, Lorine Scott, Christine Loock and Sabrina T. Wong

Abstract

Considerable evidence shows that children and families who are vulnerable because of their social and material circumstances shoulder a disproportionate burden of disease and are more likely to face both social and structural challenges in accessing healthcare. Addressing these issues in children is particularly important as evidence has demonstrated that inequities in health are cumulative over the life course.

In this article, the authors report on the RICHER (Responsive, Intersectoral-Interdisciplinary, Child-Community, Health, Education and Research) social pediatrics initiative, which was designed to foster timely access to healthcare across the spectrum from primary care to specialized services for a community of inner-city children who have disproportionately high rates of developmental vulnerability. Their research shows that the initiative has effectively "reformed" health services delivery to provide care in ways that are accessible and responsive to the needs of the population. RICHER is an intersectoral, interdisciplinary outreach initiative that delivers care through the formation of innovative partnerships. The authors share research results that demonstrate that the RICHER model of engagement with children and families not only effectively fosters access for families with multiple forms of disadvantage, but also improves outcomes by empowering parents of particularly vulnerable children to become more active participants in care.

opulation studies throughout the world have established links between social and material deprivation and poor health over the life course and drawn attention to conditions that contribute to inequities in children's health (Lloyd et al. 2010; Shonkoff et al. 2009; Stansfeld et al. 2010). Clinicians and researchers have been challenged to identify approaches that are effective in redirecting these children's poor health trajectories.

In recent years, social pediatrics has been recognized as an approach that effectively addresses the health needs of children who are vulnerable because of their social and material circumstances (Ford-Jones et al. 2008; Guyda et al. 2006; Julien 2004). We have had an opportunity to research the RICHER (Responsive, Intersectoral-Interdisciplinary, Child-Community, Health, Education and Research) social pediatrics initiative since its inception (Lynam et al. 2008, 2010). The initial conceptual work that informed the development of RICHER incorporated insights from Dr. Gilles Julien's pioneering work, literature on inequities in health, best practices in children's health and research related to the social organization of health services delivery for populations on the social and material margins. Our aim in writing this article is to provide an overview of this initiative and share key research insights.

Why RICHER?

Child development is both an indicator and a determinant of health and is acutely affected by social and material disadvan-

tages. The 2007 provincial mapping of children's development indicated that two thirds of the children in Vancouver's inner city enter school developmentally vulnerable (Kershaw et al. 2005). Vancouver's inner city, which is the host community for the RICHER initiative, remains one the poorest in the country.

Demographic analyses and related research in Vancouver's inner city offer a family and community profile that reflects multiple axes of disadvantage and illustrate that the disadvantage is material but also gender and race related. Such social-environmental circumstances are recognized as having the greatest negative impact on children's health trajectories (Lloyd et al. 2010; Stansfeld et al. 2010). It is of particular concern that the health impact of these forms of disadvantage is cumulative over the life course (Hertzman 2009; Power et al. 2007; Shonkoff et al. 2009; Stansfeld et al. 2010).

Developmental delay and poor physical and mental health are the manifestations of health inequities, which are magnified when there are barriers to accessing primary health care (PHC) (Bradshaw 2001; Commission on Social Determinants of Health 2008; Gordon 2003; Marmot et al. 2008; Starfield et al. 2005). However, while "markers" of poor health (e.g., illness, delayed growth and development) lie in the traditional domains of biomedicine, the pathways of influence and, hence, the remedies to effect positive change extend beyond these domains.

Recent studies show that enhancing social-protective factors, including creating avenues for accessing developmentally appropriate and socially rich interactions, can improve health and development among children living in poverty (Hall et al. 2009; Lynam et al. 2010; Powers et al. 2009, Shonkoff et al. 2009; Spencer et al. 2005). RICHER seeks to enhance traditional clinical practice approaches by partnering with community organizations to mobilize social supports and create avenues for engagement to foster children's and families' connectedness (Inner City Response Initiative 2011).

Social Organization of Health Services: Integrating PHC with Specialized Services

Health-care systems contribute most to improving health and health equity where the institutions and services are organized around the principle of universal coverage ... and where the system [includes] ... the PHC model of locally organized action across the social determinants of health, and ... entry to care with upward referral.

- Commission on Social Determinants of Health, Closing the Gap in a Generation

The above quotation signals the central role of PHC in health systems and highlights the importance of creating effective structural arrangements between PHC and specialized services. A strong PHC foundation leads to positive population health

outcomes, including increased knowledge about health and care; reduced duration and effects of acute and episodic conditions (Starfield 1998; Starfield et al. 2005; Watson et al. 2004; Wong et al. 2007); and reduced risk and effects of continuing health conditions.

It is of particular concern that the health impact of these forms of disadvantage is cumulative over the life course.

However, where high rates of complex and chronic illnesses and material and social disadvantages occur, different models of PHC are necessary to ensure access to the full range of health services and care that is responsive (Health Officers Council of British Columbia 2008; Lynam et al. 2010; Public Health Agency of Canada 2008; Smith et al. 2006). For example, a central, yet often-unexamined assumption of PHC is that families will have the knowledge, skills and resources to navigate the healthcare system, to follow through on referrals, to enact recommended treatments and/or to clearly present their concerns about their child to healthcare providers in order to initiate treatment. Our experience and research shows, however, that for families with multiple forms of disadvantage, including being isolated or marginalized, such assumptions are not borne out (Carbone et al. 2004; Dixon-Woods et al. 2006; Moore 2009; Pauly et al. 2009). As such, additional considerations for PHC also include the mobilization of supports for such families to engage with clinicians.

Moreover, health services are typically organized into programs by medical specialty, age group or geographical region, which leads to fragmented policies and practices, with complex and confusing points of entry. "At risk" children may need services from multiple sectors and through several developmental stages; to be responsive, fragmentation must be addressed (Baum et al. 2009). It is increasingly evident that because of the complex and varied healthcare needs of these children and families, clinical programs must be linked with services across the continuum of care, from access to community-based networks and sources of support to specialized healthcare services (Lynam et al. 2008, 2010; Wong et al. 2010).

The complexities of access are further compounded by families' social circumstances and clinicians' responses to them. Our own and others' research has shown that families on the social margins often feel "pre-judged" (Lynam et al. 2010) and must frequently confront often-unfounded assumptions others hold about them (Carrillo et al. 2011; Dixon-Woods et al. 2006; Reutter et al. 2009). Clinicians need to be mindful of the ways social context influences families' experiences. For example, in our community, many children in Aboriginal families are coping with the legacy of policies that have eroded the capacities for family and community support of children. Similarly, many families are led by single mothers, many of whom have themselves been subject to multiple risks and trauma over their lifetime. Legacies such as these not only create fragile living conditions for many children, they also continue to play out in the context of healthcare encounters.

While "markers" of poor health lie in the traditional domains of biomedicine, the pathways of influence and, hence, the remedies to effect positive change extend beyond these domains.

In recognition of these challenges, RICHER has created new structural arrangements to facilitate access and to mobilize the range of resources needed to support families in fostering development and managing their child's health condition.

RICHER Clinical Program and Research

RICHER is a unique collaboration between the formal and informal sectors. In our case, it is an interdisciplinary and intersectoral collaboration between a tertiary care facility, primary care, public health and community organizations. The initiative began providing clinical services to complement existing public health and primary care programs in 2008 after extensive consultation and engagement with community groups and health services providers. The clinical team developed a partnership agreement with community-based organizations and created structures that have enabled ongoing dialogue as services have developed.

In the RICHER clinical program, nurse practitioners are the primary care clinicians. The complexity of the children's health needs necessitated that the initial outreach of general pediatrics and the sub-specialized services of developmental pediatrics be augmented. In 2010, the Specialized Pediatric Outreach Consultation for Kids ("SPOCK") component of the program developed. Unique to the RICHER model, clinicians (primary care and specialists) enact their practice directly in the community venues identified by the community providers as safe and trusted places where families naturally congregate. For example, clinics are held in daycares, schools, community centres and non-profit family support agencies. As well, the referral process is barrier free and is made directly through a parent, child care worker, public health nurse, community support worker, family doctor or others. Assessments may be booked in the "traditional manner," but many families "drop in" and receive the care they require. All clinicians - primary care through sub-specialist - connect with each other directly daily or weekly regarding the provision of care in ways that work for the family. In addition, the clinical team meets weekly with representatives from the community agencies, at the "community table," to work together on issues the commu-

nity has identified as affecting the health of the community. A key component of clinicians' therapeutic recommendations is connecting parents and families to supportive environments, building parental capacity and using grassroots community programs to augment traditional healthcare interventions in addressing the developmental needs of children.

The research on RICHER is informed by critical theoretical perspectives and employs a community-based participatory approach (Ponic et al. 2010; Wallerstein et al. 2010). This approach is characterized by ongoing dialogue and engagement with the constituents of the research to ensure questions of relevance are asked and methods employed to examine them are respectful of the community. Over the past five years, we have had extensive participation by families, clinicians, community key informants and representatives of community-based organizations. Early in our discussions, it became clear that the children and families we wanted to learn from had considerable, often negative, experiences, of being "under surveillance" by different state agencies and community organizations. The community was particularly hesitant to engage in research that "took information away" and did not necessarily give anything back that they viewed to be of value. We were therefore challenged to ensure that the processes of engagement to undertake our research evolved out of community consultation and that our practices were respectful.

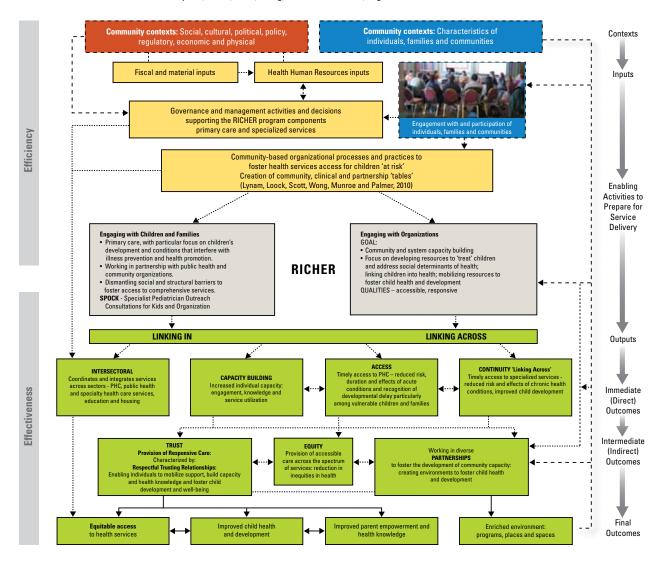
Through our ongoing research on RICHER, we have gathered qualitative data to identify both social and structural barriers to healthcare access and to explicate the organizational processes and practices that have fostered access to healthcare services and supported clinicians' engagement with the community (Lynam et al. 2010). As access is strongly linked with positive health outcomes, in 2010 we administered a self-report survey to a significant proportion of families receiving clinical services from RICHER. The purposes of the survey were to assess if the program was reaching the target population and to consider parents' experiences of PHC. The survey incorporated standardized measures that reflected important dimensions of PHC, including accessibility, continuity (informational, relationship, and management continuity), interpersonal communication, patient activation and patient empowerment. Patient activation and empowerment are of particular interest because they are associated with better illness management and appropriate health services utilization.

In addition to identifying barriers to healthcare access, our data have enabled us to illustrate ways the clinicians have engaged to dismantle such access barriers and ways health services have been "re-formed" to be more responsive to the needs of these children and their families (Lynam et al. 2010). As the initiative evolved and data were gathered, we iteratively conceptualized the RICHER logic model (Figure 1), which builds upon Watson and colleagues' (2009) model of PHC.

The model provides a conceptual map of the processes, practices and outcomes we have mapped and have demonstrated through our research. In particular, it illustrates the importance of administrative and leadership support for the implementation of the practice, and positions the community table as a key component of the RICHER organizational structure because it creates an avenue for ongoing engagement with the initiative as it continues to evolve. The model seeks to illustrate the nature of the clinicians' practice and patient outcomes. Analyses of our survey data show that the RICHER approach does foster access to primary healthcare for children and families facing significant poverty and multiple forms of social and material vulnerability,

FIGURE 1. The RICHER logic model

RICHER Responsive Intersectoral Interdisciplinary Child Health Education Research Lynam, Loock, Scott, Wong, Munroe and Palmer, Logic Model - Version 3 - 2010



PHC = primary health care

including family instability and housing and food insecurity (Wong et al. 2010, 2011). Moreover, the children accessing RICHER clinical programs have considerably higher rates of complex health conditions and developmental challenges than would be expected in a typical population. Early results also suggest that parents' positive appraisal of the quality of their relationship with the primary care clinicians (nurse practitioners) is strongly associated with parents' positive assessment of (1) the knowledge they have acquired about their child's health condition, (2) their (improved) capacity to manage their child's health condition and (3) their ability to mobilize the resources needed to support their child (Wong et al. 2011).

"The RICHER approach does foster access to primary healthcare for children and families facing significant poverty and multiple forms of social and material vulnerability."

Summary

In enacting RICHER, clinicians have sought to recognize the social roots of inequities in the ways relationships are constituted and in the nature of resources mobilized to respond to the complex (mental, physical and developmental) health challenges of vulnerable children and families. In many ways, RICHER began as a best practices approach, drawing upon research insights from a number of disciplinary perspectives while also working collaboratively, and within, existing organizational structures to complement, extend and enrich existing primary and specialized services.

Acknowledgements

The research that has been cited in this manuscript was funded by grants from the Canadian Institutes of Health Research and the Michael Smith Foundation for Health Research. Our community partners have played an integral role in the design and delivery of the initiative. In particular, we acknowledge Ray Cam Community Co-operative, the Network of Inner City Community Service Societies and the Network of East Vancouver Community Organizations, which includes Vancouver Native Health and the YWCA. We acknowledge the leadership and support of BC Children's Hospital of the Provincial Health Services Authority, particularly the support of B. Fitzsimmons and B. Palmer, who along with V. Munroe, of Vancouver Coastal Health, have engaged with us as decisionmaking partners on our research. HQ

References

Baum, F.E., M. Begin, T.A.J. Houweling and S. Taylor. 2009. "Changes Not for the Fainthearted: Reorienting Health Care Systems toward Health Equity through Action on the Social Determinants of Health." American Journal of Public Health 99(11): 1967–74.

Bradshaw, J., ed. 2001. Poverty: The Outcomes for Children. London: Family Policy Studies Centre.

Carbone, S., A. Fraser, R. Ramburuth and L. Nelms. 2004. Breaking Cycles, Building Futures. Promoting Inclusion of Vulnerable Families in Antenatal and Universal Early Childhood Services: A Report on the First Three Stages of the Project. Victoria, Australia: Victorian Department of Human Services.

Carrillo, J., V. Carrillo, H. Perez, D. Salas-Lopez, A. Natale-Pereira and A. Byron. 2011. "Defining and Targeting Health Care Access Barriers." Journal of Health Care for the Poor and Underserved 22: 562–75.

Commission on Social Determinants of Health. 2008. Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health. Final Report of the Commission on Social Determinants of Health. Geneva, Switzerland: World Health Organization.

Dixon-Woods, M., D. Cavers, S. Agarwal, E. Annandale, A. Arthur, J. Harvey, et al. 2006. "Conducting a Critical Interpretive Synthesis of the Literature on Access to Healthcare by Vulnerable Group." BMC *Medical Research Methodology* 6(1): 35.

Ford-Jones, E.L., R. Williams and J. Bertrand. 2008. "Social Paediatrics and Early Child Development: Part 1." Paediatric Child Health 13(9): 755-58.

Gordon, D. 2003. "Health Policy in Relation to Improving Equity in Child Health." Pediatrics 112: 725–26.

Guyda, H., S. Razack and N. Steinmetz. 2006. "Social Paediatrics." Paediatric Child Health 11(10): 643-45.

Hall, J., K. Sylva, E. Melhuish, P. Sammons, I. Siraj-Blatchford and B. Taggart. 2009. "The Role of Pre-school Quality in Promoting Resilience in the Cognitive Development of Young Children." Oxford Review of Education 35(3): 331-52.

Health Officers Council of British Columbia. 2008. Health Inequities in British Columbia: Discussion Paper. Victoria, BC: Author.

Health Officer's Council of British Columbia, P.W. Group, ed. 2007. Taking Action on Child Poverty. Richmond, BC: British Columbia Conservation on Health.

Hertzman, C. 2009. "The State of Child Development in Canada: Are We Moving Toward, or Away from, Equity from the Start?" Paediatric Child Health 14(10): 673-76.

Inner City Response Initiative. 2011. What Is a "Place-Based" Approach? Why Are Communities like Strathcona Urging Governments to Support Place-Based Strategies? Vancouver, BC: Author. Retrieved July 7, 2011. http://www.raycam.org/index.php?option=com_docman&task=cat_ view&gid=31&Itemid=>.

Julien, G. 2004. A Different Kind of Care: The Social Pediatrics Approach. Montreal, QC: McGill-Queen's University Press.

Kershaw, P., K. Trafford and C. Hertzman. 2005. The BC Atlas of Child Development. Human Early Leaning Partnership (Vol. 40). Vancouver, BC: Western Geographical Press.

Lloyd, J.E.V., L. Li and C. Hertzman. 2010. "Early Experiences Matter: Lasting Effect of Concentrated Disadvantage on Children's Language and Cognitive Outcomes." *Health and Place* 16(2): 371–80. Lynam, M.J., C. Loock, L. Scott and K.B. Khan. 2008. "Culture, Health and Inequalities: New Paradigms, New Practice Imperatives." Journal of Research in Nursing 13(2): 138–48.

Lynam, M.J., C. Loock, L. Scott, S.M. Wong, V. Munroe and B. Palmer. 2010. "Social Paediatrics: Creating Organisational Processes and Practices to Foster Health Care Access for Children 'at Risk'.' *Journal of Research in Nursing* 15(4): 331–47.

Marmot, M., S. Friel, R. Bell, T.A.J. Houweling and S. Taylor. 2008. "Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health." The Lancet 372: 1661-69.

Moore, T. 2009. "The Inclusion Agenda in Early Childhood Services: Evidence, Policy and Practice." In Universal Access to Early Childhood Education: Department of Education and Early Childhood Development Shared Learning Forum. Victoria, Australia: Centre for Community Child Health, The Royal Children's Hospital.

Pauly, B.M., K. MacKinnon and C. Varcoe. 2009. "Revisiting 'Who Gets Care?' Health Equity as an Arena for Nursing Action." Advances in Nursing Science 32(2): 118-27

Ponic, P., C. Reid and W. Frisby. 2010. "Cultivating the Power of Partnerships in Feminist Participatory Action Research in Women's Health." Nursing Inquiry 17: 324-35.

Power, C., K. Atherton, D.P. Strachan, P. Shepherd, E. Fuller, A. Davis, et al. 2007. "Life-Course Influences on Health in British Adults: Effects of Socio-Economic Position in Childhood and Adulthood." International Journal of Epidemiology 36(3): 532–39.

Powers, A., K.J. Ressler and R.G. Bradley. 2009. "The Protective Role of Friendship on the Effects of Childhood Abuse and Depression." Depression and Anxiety 26(1): 46–53.

Public Health Agency of Canada. 2008. The Chief Public Health Officer's Report on the State of Public Health in Canada 2008: Addressing Health Inequalities. Ottawa, ON: Author.

Reutter, L.I., M.J. Stewart, G. Veenstra, R. Love, D. Raphael and E. Makwarimba. 2009. "Who Do They Think We Are, Anyway? Perceptions of and Responses to Poverty Stigma." Qualitative Health Research 19(3): 297-11.

Shonkoff, J.P., W.T. Boyce and B.S. McEwen. 2009. "Neuroscience, Molecular Biology, and the Childhood Roots of Health Disparities." Journal of the American Medical Association 301(21): 2252–59.

Smith, D., N. Edwards, C. Varcoe, P.J. Martens and B. Davies. 2006. "Bringing Safety and Responsiveness into the Forefront of Care for Pregnant and Parenting Aboriginal People." Advances in Nursing Science 29(2): E27-44.

Spencer, N., C. Colomer, G. Alperstein, P. Bouvier, J. Colomer, O. Duperrex, et al. 2005. "Social Pediatrics." Journal of Epidemiology and Community Health 59(2): 106-8.

Stansfeld, S., C. Clark, B. Rodgers, T. Caldwell and C. Power. 2010. "Repeated Exposure to Socioeconomic Disadvantage and Health Selection as Life Course Pathways to Mid-life Depressive and Anxiety Disorders." Social Psychiatry and Psychiatric Epidemiology 46(7): 549-58.

Starfield, B. 1998. Primary Care: Balancing Health Needs, Services, and Technology. New York, NY: Oxford University Press.

Starfield, B., L. Shi and J. Macinko. 2005. "Contribution of Primary Care to Health Systems and Health." Milbank Quarterly 83(3): 457-502.

Wallerstein, N. and B. Duran. 2010. "Community-Based Participatory Research Contributions to Intervention Research: The Intersection of Science and Practice to Improve Health Equity." American Journal of Public Health 100(Suppl. 1): S40-6. DOI: 10.2105/ AJPH.2009.184036.

Watson, D., A. Broemeling, R. Reid and C. Black. 2004. A Results-Based Logic Model for Primary Health Care: Laying an Evidence-Based Foundation to Guide Performance Measurement, Monitoring, and Evaluation. Vancouver, BC: Centre for Health Services and Policy Research.

Watson, D.E., A.M. Broemeling and S.T. Wong. 2009. "A Results-Based Logic Model for Primary Healthcare: A Conceptual Foundation for Population-Based Information Systems." Health Policy 5(Special Issue): 33-46.

Wong, S.T., S. Peterson, S. Regan, D.E. Watson and C. Black. 2007. Understanding British Columbians' Experiences with Primary Health Care: Developing a Sector Specific Survey. Vancouver, BC: UBC Centre for Health Services and Policy Research.

Wong, S., M.J. Lynam, C. Loock, L. Scott, V. Munroe, K.B. Khan and B. Palmer. 2010. Enacting a Richer Model of Primary Care: Responsive, Intersectoral and Interdisciplinary Child Health Education and Research. Poster Presentation at an NAPCRG Annual Meeting, Seattle, WA.

Wong, S., M.J. Lynam, K.B. Khan, L. Scott and C. Loock. 2011. The Social Pediatrics Initiative: A RICHER Model of Primary Health Care for at Risk Children and Their Families.

About the Authors

M. Judith Lynam, PhD, RN, is a professor at the University of British Columbia School of Nursing, in Vancouver, British Columbia, and an affiliate of the Child and Family Research Institute, BC Children's Hospital. She is the RICHER research lead. You can contact Dr. Lynam at 604-822-7476 or by e-mail at judith.lynam@nursing.ubc.ca.

Lorine Scott, NP(F), is a family nurse practitioner with BC Children's Hospital, and the RICHER primary care lead. She is an affiliate faculty in the UBC School of Nursing.

Christine Loock, MD, FRCPC, is a developmental pediatrician at BC Children's and Sunny Hill Hospital and an associate professor in the UBC Faculty of Medicine; she is the RICHER specialist lead.

Sabrina T. Wong, PhD, RN, is an associate professor in the UBC School of Nursing and Centre for Health Services and Policy Research.