Bridging the Congenital CMV Knowledge Gap in Massachusetts An Interdisciplinary Approach to Clinical Resource Development

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Background

- Resources in development feature two distinct but complementary components relevant to clinical care. • Each year, 1/200 babies is born with congenital cytomegalovirus (cCMV), the most common infectious cause of birth defects in U.S.¹ KNOWLEDGE GAP
- About 20% of babies with cCMV will develop long-term health problems such as hearing loss, developmental delays, visual impairment, and seizures².
- cCMV care is complicated by the possibility for late onset of disease and lack of definitive treatment or prevention options.

Knowledge gap

- Despite its clinical burden, 75% of women are not aware of the risks of cCMV infection during pregnancy³.
- Similarly, studies have shown that major cCMV knowledge gaps exist among healthcare providers^{4,5}.
- With legislation pending in Massachusetts mandating prenatal education and universal newborn screening, providing information to healthcare providers about cCMV prevention and management is critical.

Interdisciplinary Approach

- Materials will be made available through the MCC website and distributed directly to clinicians. • The Massachusetts Congenital CMV Coalition (MCC), an interdisciplinary team • Following the distribution and use of resources, program evaluation will occur to determine the of clinicians, researchers, educators, parents, and other stakeholders, works to effectiveness in addressing cCMV knowledge gaps. improve cCMV education, prevention, screening, and care in MA.
- Education models will be applied to complement early intervention and parent advocate resources, also • One goal of the group is to develop educational resources that apply to a wide developed by MCC members, to strengthen interdisciplinary connections related to cCMV care. range of clinical learners, support decision making in real time, and holistically • Project members will continue to update materials in effort to expand partnerships between specialists. encompass all aspects of cCMV care.

4. Muldoon K. M., Armstrong-Heimsoth, A., & Thomas, J. (2017). Knowledge of congenital cytomegalovirus (cCMV) among physical and occupational therapists in the United States. PLoS One, 12(10), e0185635. doi: 10.1371/journal.pone.0185635

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Clinical Resources in Development



Implementation and Next Steps

5. Dedhia, K., Tomlinson, J., Murray, N., & Park, A. (2019). Congenital cytomegalovirus and hearing loss: A pilot cross-sectional survey of otologists' and pediatric otolaryngologists' knowledge. OTO Open, 3(2), 2473974X19849874. doi: 10.1177/2473974X19849874





Structure: Quick-access checklist

^{1.} National Center for Immunization and Respiratory Diseases, Division of Viral Diseases. (n.d.). Cytomegalovirus (CMV) and congenital CMV infection. Retrieved from https://www.cdc.gov/cmv/index.html.

Beaudoin, M. L., Renaud, C., Boucher, M., Kakkar, F., Gantt, S., & Boucoiran, I. (2021). Perspectives of women on screening and prevention of CMV in pregnancy. European Journal of Obstetrics & Gynecology and Reproductive Biology, 258, 409-413. doi: 10.1016/j.ejogrb.2021.01.035

^{3.} Leruez-Ville, M., Ghout, I., Bussières, L., Stirnemann, J., Magny, J. F., Couderc, S., Salomon, L. J., Guilleminot, T., Aegerter, P., Benoist, G., Winer, N., Picone, O., Jacquemard, F., & Ville, Y. (2016). In utero treatment of congenital cytomegalovirus infection with valacyclovir in a multicenter, open-label, phase II study. American Journal of Obstetrics & Gynecology, *215*(4), 462.e1-462.e10. doi: 10.1016/j.ajog.2016.04.003