

# Implementing the Keystones of Development Curriculum into Everyday Practice at the Hackensack University Medical Center Pediatric Academic Practice

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## Introduction

Assessing development is a central component of a child's medical care, and both healthcare providers and caregivers play a pivotal role in ensuring a child's development is supported through all stages. The early years of a child's life have a long-lasting effect on their future livelihood, and caregivers greatly impact their development. However, educating caregivers to support their child's development during health maintenance visits can be difficult and daunting to trainees. Time limitations, a trainee's lack of familiarity with stages of development, or feeling unqualified to advise parents how to care for their children are some of the barriers faced during their clinical training. Developed by the Mount Sinai Parenting Center, the Keystones of Development Curriculum (KoDC) is an interactive, online curriculum which demonstrates how residents can model positive parenting behaviors and promote strong parent-child relationships within the context of routine health maintenance visits (1). The curriculum is didactically centered around 6 keystones: secure attachment, autonomy, self-regulation, perspective taking, problem solving, and academic knowledge (see Figure 1).

## Methods

Facilitated by the New Jersey Pediatric Residency Advocacy Collaborative, the pediatric academic practice at Hackensack University Medical Center (HUMC), an affiliate of Hackensack Meridian Health, which is the site for primary care education and training for the HUMC pediatric residency program, implemented the KoDC in the 2020-21 academic year in conjunction with the HealthySteps program, a nationally recognized care model that promotes parent-child bonding and support. Each incoming class of pediatric residents is required to complete the KoDC curriculum by the third month of their intern year. The curriculum is used for all health maintenance visits ranging from birth to age 6 years. Before each encounter, residents review the key curriculum aspects they would like to focus on during the visit. With the aid of the keystones pamphlets and online tools, providers can have an organized plan of what to highlight during the visits, ensuring that crucial milestones and questions are not missed. When caregivers pose questions, the residents are able to provide a clear, concise answer using key points from the curriculum. Academic faculty also were provided training for program implementation, specific to their supervisory role, through both written materials as well as a series of focus groups conducted online. The members of the interdisciplinary academic team are all encouraged to refer back to these frequently and find unique ways to implement it into the patient encounter.



Figure 1: The six Keystones which form the foundation of the KoDC

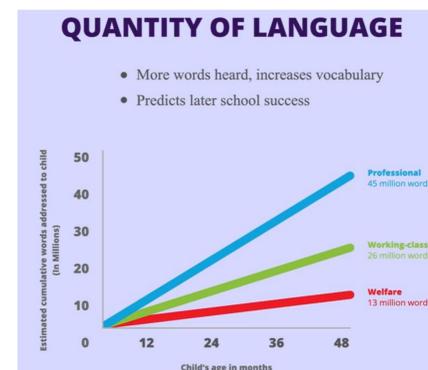


Figure 2-5: The KoDC provides residents with tools to educate and support caregivers in multiple aspects of child development.

## Results/Discussion

The implementation of this curriculum has equipped trainees to educate their patients' families on what milestones they can be expecting, supporting their child's milestones, and forming close, loving, safe relationships with their children. The KoDC training has taught residents how to engage with families and use KoDC tactics such as speaking in "parentese" (a sing-song simplified grammatically correct language style for children that caregivers can employ), teaching parents to "ping-pong" (responding to coo-ing noises by replicating the same) and forming a healthy physician-patient bond with children. These tactics help facilitate further language development in newborns and infants, the utilization of modeling techniques to demonstrate appropriate behaviors and positive reinforcement, which can be implemented at any age. There are also age appropriate handouts which outline five key goals to address for that visit. For example, at the two month visit, important tasks include talking to the infant as much as possible in their preferred language, finding soothing techniques to help the child calm down and self-sooth, staying calm as a caregiver, and providing tummy time as frequently as possible.

This curriculum is now integrated into 70-100% of all health maintenance visits and has become a key component of the resident-directed primary care in the ambulatory setting. In addition, residents are more comfortable recognizing key developmental milestones that are not met in the inpatient setting, and appropriately refer these children for further evaluation by their primary care provider, hence, taking care of the patient as a whole and not just their admitting diagnosis. One study by Hammond, et al. assessed the implementation of the KoDC across eight different pediatric residency programs by performing pre-test and post-test surveys on 67 residents. Their study demonstrated that after the completion of KoDC, residents had a significant increase in knowledge, self-efficacy, and behaviors to promote positive parenting styles (2). Through implementation of the KoDC, residents have become more confident in assessing neurotypical child development and finding ways to interact with caregivers to nurture it. The increased focus on accurate developmental assessment provides more seamless collaboration with the HealthySteps Specialist, particularly when further evaluation or additional family needs are identified.

## Conclusion

The KoDC has made learning milestones easier and more effective for trainees through action oriented learning and implementation. Many parents leave the visit with a better understanding of their child's needs, and how to support and enhance their development as they grow. As various organizations have incorporated this curriculum, it will soon be a standard that is implemented in all pediatric training programs. It is our firm belief that this has made a profound impact on the anticipatory guidance we as providers give to our caregivers, and on the caregivers' relationship with their child.

## References and Acknowledgements

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