A Guide To Pediatric Wellness through Utilization of Dragon Commands

Prasad Munusamy, MD; Parisa Biazar, MD; Jake Trimble, MD; Anthony Shadiack, DO Family Medicine Program – Grand Strand Medical Center – HCA Healthcare



•As primary care providers, one of our most critical roles is to provide pediatric preventative healthcare (1).

•Wellness visits play an important role in this by, tracking appropriate growth and developmental milestones. Nutrition and early interventions have showed promise for improving developmental issues (5).

•The American Academy of Pediatrics (AAP) and Bright Futures provide a summary of recommendations, that include a schedule of screenings, procedures and guidance based on age (1).

•In a study evaluating 79 clinics across the Carolinas, it found a substantial decrease in both wellness and follow up visits (4). These missed wellness visits have led to missed immunizations, delayed presentation of new onset conditions like type 1 diabetes and worsening management of chronic conditions like obesity (4).

•Currently, an estimated 12-16% of children have developmental disorders, out of which only 30% were diagnosed before entering school (7).

•In the United States, only 57% of mothers reported their children received developmental screening during their wellness visits (5).

•Lehmann 2015 found that Health IT tailored to the needs of pediatric health care providers can improve care by reducing the likelihood of errors.

Objective

The objective of the quality improvement project was to streamline pediatric wellness exams, through the utilization of dictation device commands to enable providers to provide evidence based and thorough examinations, ultimately providing superior care to their pediatric patients.

Methods

Based on American Academy of Pediatrics Bright Futures guidelines, a template was created for wellness visits at major milestones from the first week of life till 18-21 years old. The templates include subjective data important to address during wellness visits, objective data including major physical exam findings to observe, screening tests to order and vaccination guidelines based on age. The templates were then converted to dictation software dictation commands and saved under "Pediatric Wellness Visit" group. The first phase of the project involved emailing both dictation software command and word document versions of the templates, including instructions on how to use the commands to residents of the Family Medicine Residency Program. A pre-intervention and post intervention(12-month mark) survey was administered to study the average comfort providers had documenting pediatric wellness visits, use of dictation device in their workflow and average use of the pediatric wellness commands. Providers were also given an opportunity to provide feedback on modifications they would like to see to improve the utility of the commands.

This research was supported (in whole or in part) by HCA Healthcare and/or an HCA Healthcare affiliated entity. The views expressed in this publication represent those of the author(s) and do not necessarily represent the official views of HCA Healthcare or any of its affiliated entities.

Results

Pediatric Wellness Visit (n=18)

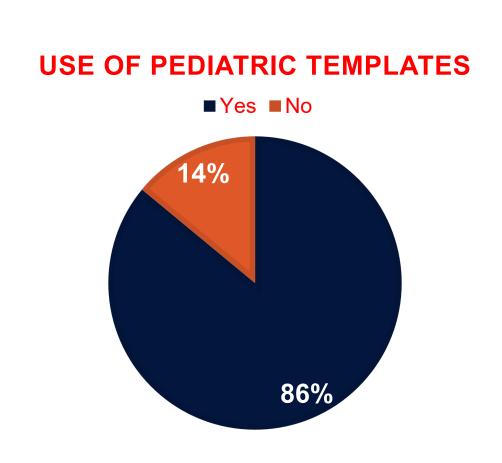
	Absolutely	Moderately	Not at All
Comfort Providing Care	75%	12%	13%
Providing Comprehensive Care	75%	15%	10%

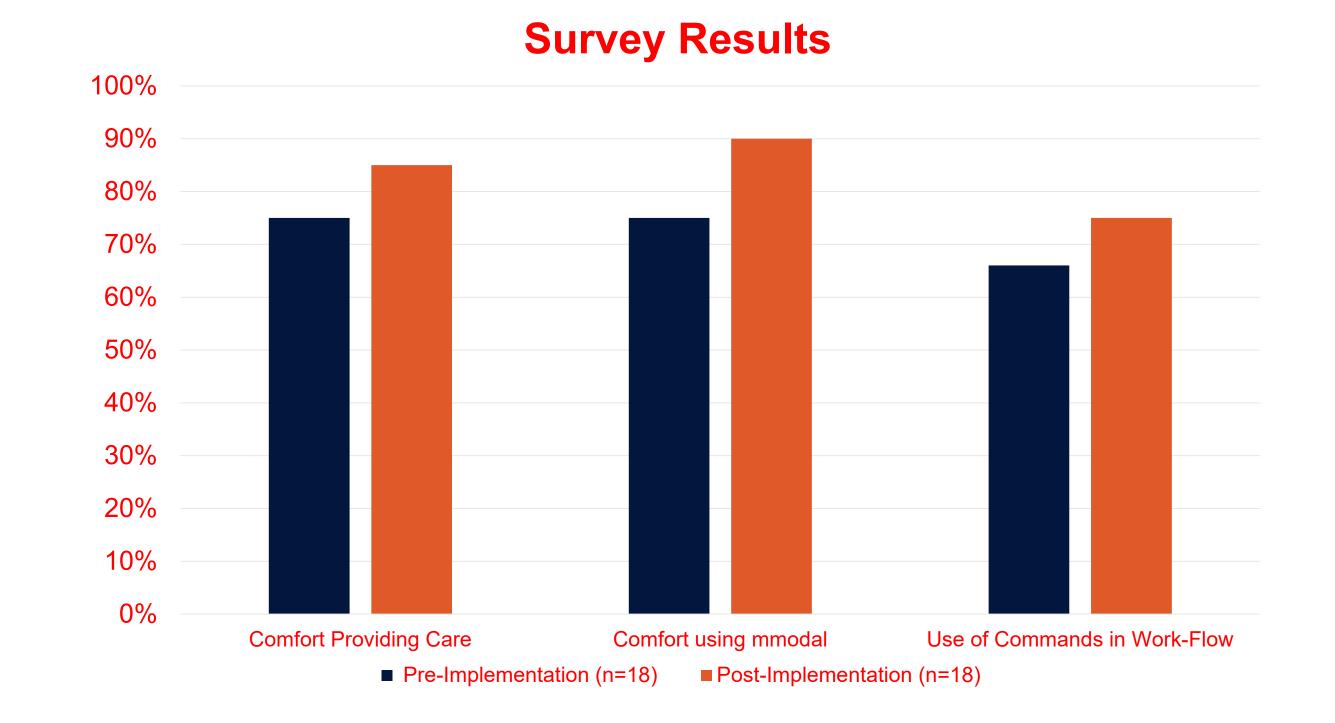
Survey Results from Pre- and Post-Implementation of Pediatric Templates

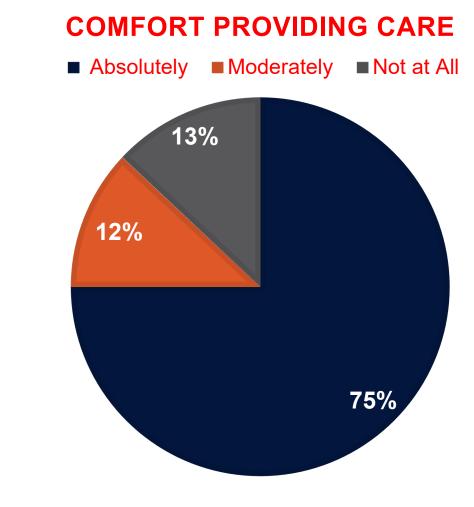
	Pre-Implementation (n=18)	Post-Implementation (n=18)
Comfort Providing Care	75%	85%
Comfort using dictation software	75%	90%
Use of Commands in Work-Flow	66%	75%

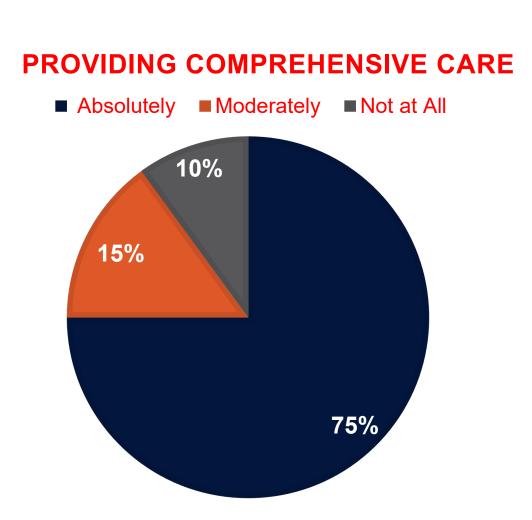


	Post Survey (n=18)
Use of Templates	86%
Efficacy of Templates	100%











Discussion

The importance of wellness visits are well established as a chance to discover acute and chronic disorders early (3). Early intervention programs, from birth to 5 years old have been shown to score higher in math's and fewer grade retention by age 15, relative to children treated between ages 5 to 8 (7). In our unique position as primary care providers, we should incorporate standardized developmental surveillance protocols outlined by the AAP (1). While most providers are aware of the protocols in broad strokes, we found that they were not being incorporated into clinical visits adequately. Furthermore, as healthcare moves towards further integration with Information Technology, utilizing tools such as dictation commands and EHR (electronic health record) templates would improve the quality of healthcare provided to patients. Based on our study, there was a 20% increase in confidence in providing wellness visits after implementing the pediatric wellness visit commands. Post survey noted that 75% of our study group was confident using the dictation software device, out of which 65% of users were confident using templates in their workflow. Utilization of different modalities including creating templates on EHR would possibly increase the utility of the pediatric wellness visit templates and include individuals that aren't as confident using the dictation software device. A child's brain is highly adaptable, especially in the first three years of life (7). In March of 2020, the CDC posted guidelines emphasizing the importance of routine wellness visits and immunizations, especially for children less than 2 years old (2). As family medicine physicians it is our duty to ensure we provide efficient and through wellness exams, especially in our pediatric patients.

Conclusion

- •Use of commands showed an increase in use of commands in clinic work-flow, providing comprehensive wellness exams and overall care to pediatric patients.
- •There was 88% utility of templates, which may be attributed to the vector the pediatric templates were utilized with.
- •Greater utilization may be obtained by incorporating multiple vectors including digital checklists that can be given to patients and integrated templates in electronic medical records like EHR.
- •As family medicine physicians it is our duty to ensure we provide efficient and through wellness exams, especially in our pediatric patients.

References

- 1. Wood, S.K., & Sperling, R. (2019, March). Pediatric Screening: Development, Anemia, and Lead. *Primary care*, 46(1), 69-
- 84. https://doi.org/10.1016/j.pop.2018.10.008

 2. Agostiniani, R., Bozzola, E., Staiano, A., Del Vecchio, A., Mazzone, T., Greco, L., Corsello, G., & Villani, A. (2020, September 16). Providing pediatric well-care and sick visits in the COVID-19 pandemic era: The recommendations of the Italian pediatric society. *Italian Journal of*
- 3. Vogel, M., Beger, C., Gausche, R., Jurkutat, A., Pfaeffle, R., Körner, A., Meigen, C., Poulain, T., & Kiess, W. (2021, April 16). COVID-19 pandemic and families'
- utilization of well-child clinics and pediatric practices attendance in Germany. *BMC Research Notes*, *14*(1). https://doi.org/10.1186/s13104-021-05562-3

 4. Brown, C.L., Montez, K., Amati, J.B., Simeonsson, K., Townsend, J.D., Orr, C.J., Palakshappa, D., & Tchounwou, P.B. (2021, May 27). Impact of COVID-19 on Pediatric Primary Care Visits at Four Academic Institutions in the Carolinas. *International Journal of Environmental Research and Public*
- 5. Oyungu, E., Roose, A., Ombitsa, A.R., Vreeman, R.C., & McHenry, M.S. (2021). Child Development Monitoring in Well-baby Clinics in Kenya. *International Journal of Maternal and Child Health and AIDS*, 10(1), 128-133. https://doi.org/10.21106/ijma.473

