

Improving Resident Confidence and Competency for Well Child Visits from Infancy to Two Years of Age

Genevieve Riebe, MD

Introduction

Well child visits (WCV) from infancy to two years of age comprised approximately 8.5% of resident visits at the Alvernon Family Medicine Clinic in 2014. The objective of the project was to improve self-reported resident competency and confidence on a variety of measures for WCVs.

Methods

23 residents at the Alvernon Family Medicine Clinic participated in the project. A survey was given to assess self reported competency and confidence on a variety of components of a WCV, 6 months apart, pre-and post-intervention. The intervention was 1 month after the first survey. The intervention included the following:

- **1 hour Teaching Day Lecture** covering: lead, anemia and genetic screening, fever and antipyretic dosing, anticipatory guidance and immunization schedules
- **Epic Smart Phrases for:** anticipatory guidance for all well child visits, antipyretic dosing, lead screening, and immunization schedules

Figure 1. Ibuprofen Dosing Chart (Epic Smart Phrase)

Ibuprofen dosage chart				
Find your child's weight. Follow the column that matches your child's weight to drops, liquid or chewable tablets.				
Weight	12 to 17 lbs. 5.4 – 8.1 kg	18 to 23 lbs. 8.2 – 10.8 kg	24 to 35 lbs. 10.9-16.3 kg	36 to 47 16.4 – 21.7 kg
Age	6 to 23 months		2 to 3 years	4 to 5 years
Dose (milligrams)	50 mg	75 mg	100 mg	150 mg
Drops (50 mg/1.25 mL)	1.25 mL (2/3 dropper)	1.875 mL (1 dropper)	2.5 mL (1 and 1/3 dropper)	3.75 mL (2 droppers)
Liquid or suspension (100 mg/5 mL)	---	---	5 mL (1 teaspoon)	7.5 mL (1 and 1/2 teaspoon)
Chewable tablets (50 mg each)	---	---	2 tablets	3 tablets

Results

- Increased confidence providing a comprehensive WCV
- Increased competency in ability to provide anticipatory guidance to parents, selecting appropriate vaccines and assessing developmental milestones
- Increase in ordering 2nd newborn screen and providing anticipatory guidance in the AVS

Figure 2. Resident Self-Reported Competency in Providing a Anticipatory Guidance to Parents in a Well Child Visit

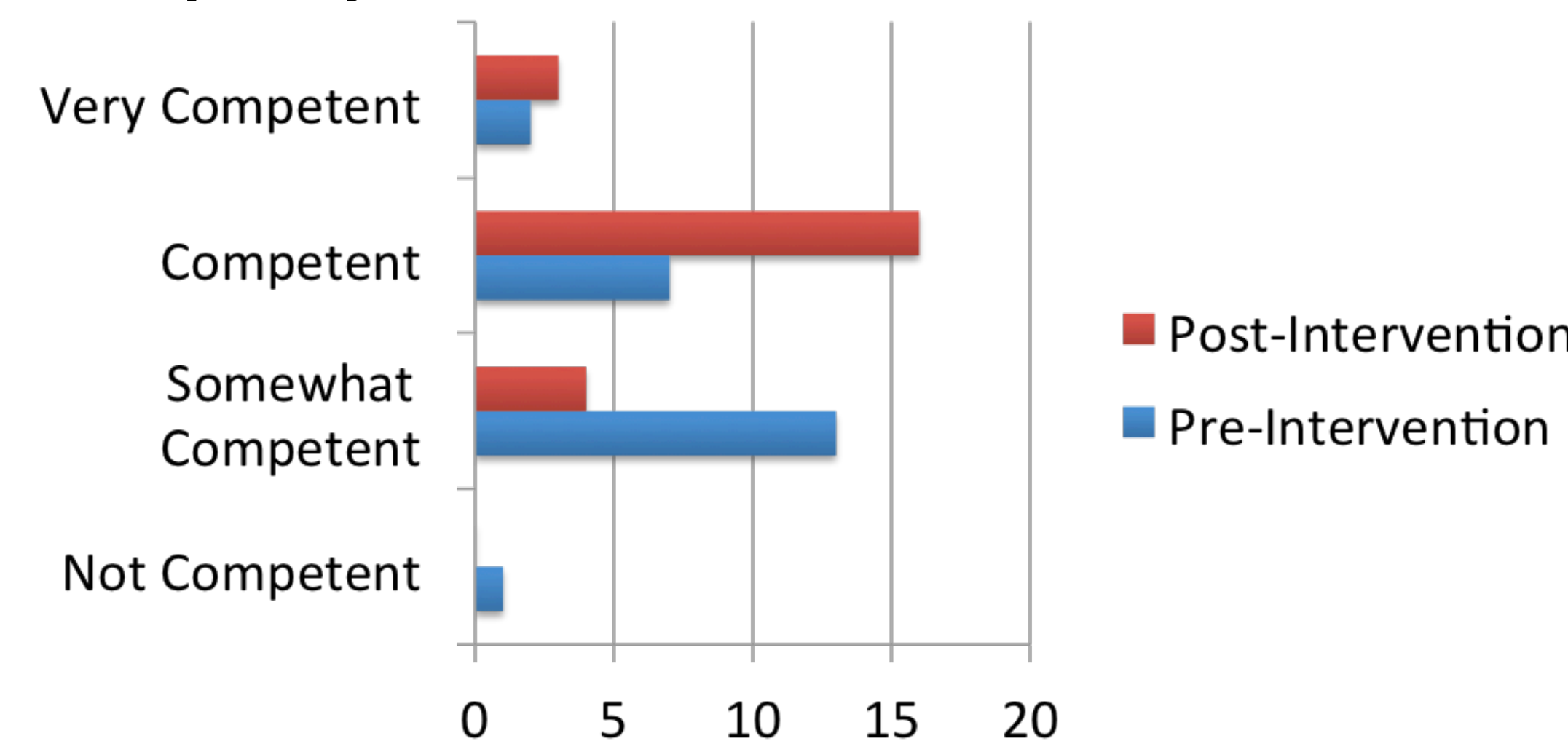


Figure 3. Resident Self-Reported Confidence in Providing a Comprehensive Well Child Visit

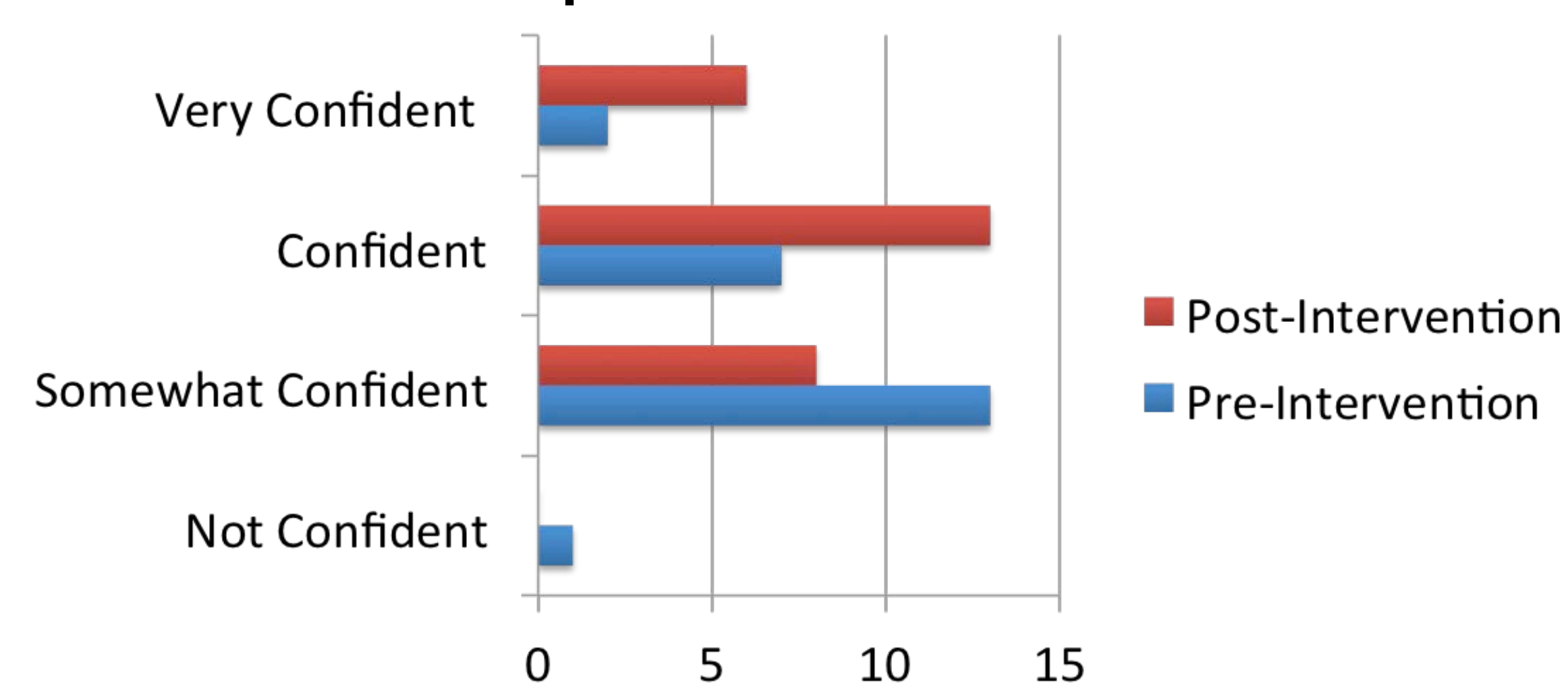


Figure 4. Well Child Visit Rubric

Age	Vaccines (on schedule)	Labs	Universal Screening	Anticipatory Guidance	Discuss
Newborn/ 2 Week Visit	1. Hep B (hospital)	1. NBS #1 (hospital) 2. NBS #2	Hearing	1. Feeding, weight gain 2. Sleep 3. Fever 4. Car Seat	1. Introduction to Practice 2. Anticipatory Guidance 3. EPSDT Schedule 4. Vaccine Schedule
1 month				1. Feeding, weight gain 2. Family adjustment to baby	1. Anticipatory Guidance
2 months	1. Pediarix (DTaP, IPV, Hep B) 2. Hib 3. Pneumococcal 13 4. Rotavirus			1. Feeding 2. Colic 3. Acetaminophen Dosing 4. Start tummy time	1. Anticipatory Guidance 2. Acetaminophen Dosing 3. Vaccine Fact Sheets go over key points
4 months	1. Pentacel (DTaP, Hib, IPV) 2. Pneumococcal 13 3. Rotavirus			1. When to introduce solids 2. Oral Care	1. Anticipatory Guidance
6 months	1. Pediarix (DTaP, IPV, Hep B) 2. Pneumococcal 13 3. Rotavirus 4. Consider influenza			1. Baby Proofing 2. How to start new foods 3. Begin giving ROR books at all WCC	1. Anticipatory Guidance 2. Ibuprofen Dosing
9 months				1. Discipline 2. Safety in the home 3. Reading	1. Anticipatory Guidance
12 months	1. MMR 2. Varicella 3. Hep A 4. PCV 13	1. Hg 2. Lead level		1. Car Seat Parameters 2. Establish Routines 3. Dentist Appt 4. Language Development	1. Anticipatory Guidance 2. Poison Control Hotline 3. Discuss lab work
15 months	1. Hib 2. DTaP			1. Healthy Eating 2. Limit Screen Time 3. Baby Proofing	1. Anticipatory Guidance
18 months	1. Hep A		M-CHAT	1. Toilet Training 2. Water Safety	1. Anticipatory Guidance
24 months		1. Lead level	M-CHAT	1. Toilet Training 2. Language Development	1. Anticipatory Guidance

Conclusions / Future Directions

1. Providing education and tools to residents increased self reported competence (Fig. 2) and confidence (Fig. 3) in completing a well child visit
2. 22 residents felt that a milestone chart and Epic smart phrases help improve their well child visits, and 16 felt that lectures about well child visits would help them

References

1. "Immunization Schedules." Center for Disease Control and Prevention, 26 Jan 2015. Web 28 Aug 2014. www.cdc.gov/vaccines/schedules/.
2. Wengrovitz AM, Brown MJ. "Recommendations for blood lead screening of medicaid-eligible children aged 1-5 years: an updated approach to targeting a group at high risk." Center for Disease Control and Prevention, 7 Aug 2009. Web 28 Aug 2014. www.cdc.gov/mmwr/preview/mmwrhtml/rr5809a1.htm.

Acknowledgments

This project was mentored by Dr. Colleen Cagno and Dr. Judith Gordon, whose help is acknowledged with great appreciation.