

A Multidisciplinary Approach to Keeping Up with the Pipeline for Novel, Complex Therapies in Home Infusion

Leita Frey, PharmD, BCPS | Kayla Szabo, PharmD, BCNSP | Christie Fisher, MSN, MBA, RN, CRNI, IgCN

Department of Pharmacy Services
CarePathRx, Oakdale, PA 15071



BACKGROUND

- The U.S. Food and Drug Administration (FDA) approved 37 new molecular entities and therapeutic biological products in 2022 and nearly half (40.5%) are likely to be administered within the home infusion market.¹
- Home infusion therapies continue to become more complex with special handling and administration considerations which can be rather costly at greater than \$1,000 per patient per month.²
- Studies have shown poor drug knowledge among clinicians can lead to higher error rates.^{3,4}
- Our organization recognized this potential knowledge gap and created a multidisciplinary task force to develop therapy specific clinical guidelines focusing on thorough planning and education of novel home infusion therapies to deliver superior outcomes.

PURPOSE

- Establishing a proactive, collaborative, multidisciplinary approach to clinical guideline formation and implementation of complex, novel agents such as biologics will elevate generalist level clinicians to specialists, enhancing patient outcomes without increasing resources in home infusion.

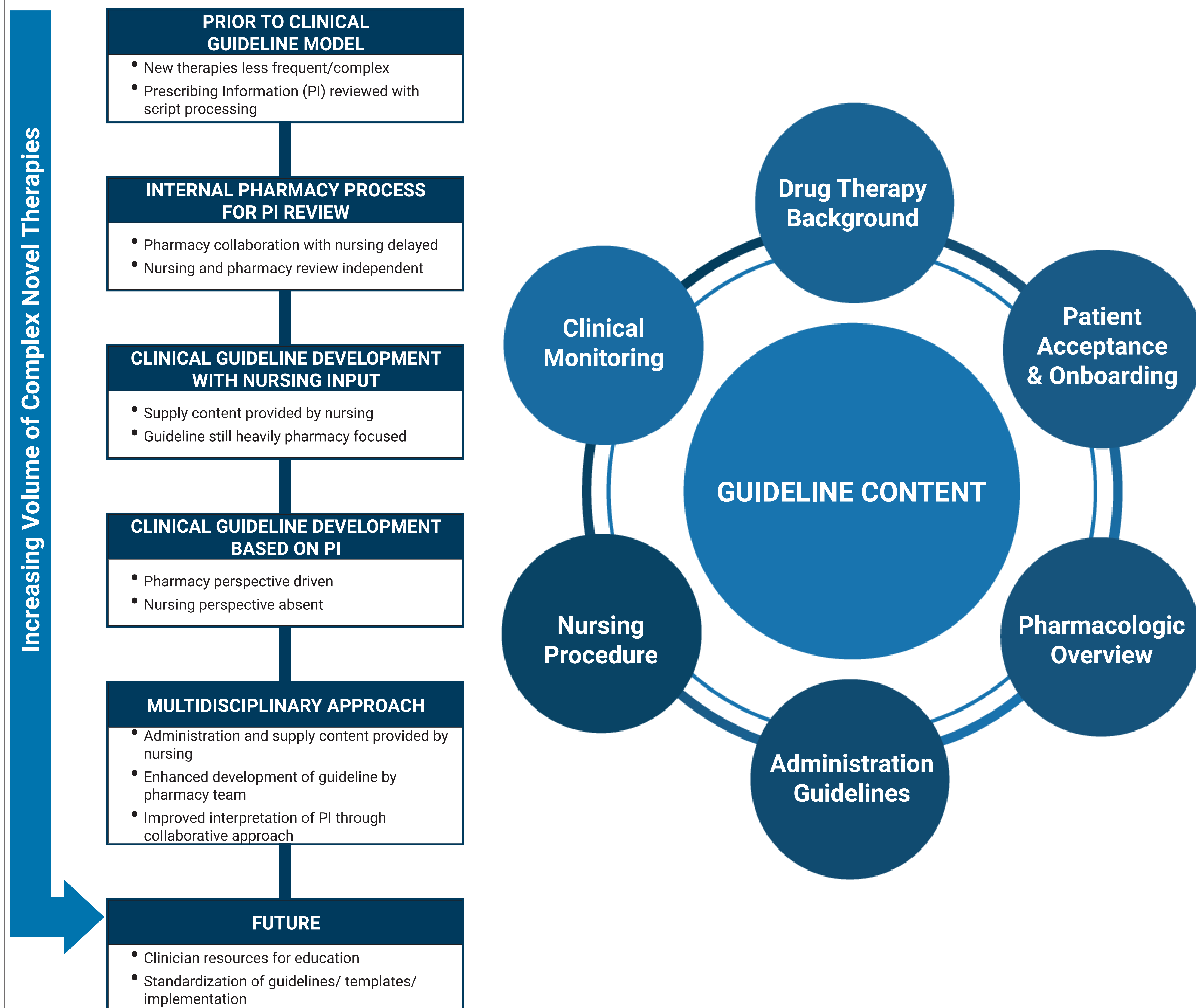
RESULTS

- This multidisciplinary approach to clinical guideline development with an expanded interpretation of the literature has produced a robust tool to guide clinical practice. Pharmacists and nurses report improved confidence and satisfaction from thoroughly prepared guidelines and protocols prior to implementing novel home infusion therapies.

Testimonials:

- “Our nurses have increased confidence in administering home infusions due to the knowledge gained from the clinical guidelines. Knowing the guidelines are written with nursing and pharmacy input ensures that we are following best practices to provide our patients with the high-quality care they deserve.” - Home Health Agency Nurse
- “While utilizing the clinical guidelines, our nurses gather valuable information from the patient to provide our pharmacists, thereby optimizing patient infusion needs, preventing medication errors, and reducing health care spending.” - Home Infusion Clinical Pharmacist
- “Having clinical guidelines for nurses and pharmacist to reference is extremely important. It helps keep the medication information and standards of practice streamlined, so that we are all on the same page, have the same knowledge and all doing the same thing so that our patients receive the best care and up-to-date information.” - Home Infusion Nurse
- “The guidelines are very helpful because they even go a step further than just using a package insert for reference. They clearly outline what we need to know about the patient prior to the start of therapy, as well as how it is administered. It is extremely helpful for the nurse to ensure all supplies needed make it to the patient and home health nurse.” - Home Infusion Clinical Pharmacist

METHODS



DISCUSSION

- The pipeline is flooded with complex novel therapies for home infusion and further growth is expected.
- Without a standardized approach clinicians will find it challenging to maintain clinical competence among new home infusion therapies.
- A multidisciplinary approach to clinical guideline development allows for a more comprehensive implementation of therapies.
- Future research at our institution will focus on objectively measuring implementation outcomes of both providers and patients.

CONCLUSION

- A multidisciplinary approach to development of home infusion clinical guidelines results in better-informed clinicians, leading to superior patient outcomes and promoting clinical excellence among home infusion providers.

REFERENCES

1. U.S. Food and Drug Administration (FDA) Center for Drug Evaluation and Research. New drug therapy approvals 2022. January 2023. Available at: <https://www.fda.gov/media/164429/>
2. Zuckerman AD, Carver A, Cooper K, et al. An Integrated Health-System Specialty Pharmacy Model for Coordinating Transitions of Care: Specialty Medication Challenges and Specialty Pharmacist Opportunities. *Pharmacy (Basel)*. 2019;7(4):163.
3. Frith KH. Medication errors in the intensive care unit: literature review using the SEIPS model. *AACN Adv Crit Care*. 2013;24(4):389-404.
4. Farzi S, Irajpour A, Saghaei M, Ravaghi H. Causes of Medication Errors in Intensive Care Units from the Perspective of Healthcare Professionals. *J Res Pharm Pract*. 2017;6(3):158-165.