

Utilizing LEAN Tools to Develop and Test Standardized Work in a Residency Clinic

Mary Stock Keister MD

Lehigh Valley Health Network, Mary_C.Stockkeister@lvhn.org

Karen A. Taus PMP

Lehigh Valley Health Network, Karen.Taus@lvhn.org

Follow this and additional works at: <https://scholarlyworks.lvhn.org/family-medicine>

Published In/Presented At

Stock Keister, M. Taus, K. (2018, December 6-9). *Utilizing LEAN Tools to Develop and Test Standardized Work in a Residency Clinic*.

Poster Presented at: Conference on Practice Improvement Society for Teachers in Family Medicine (STFM), Tampa, FL.

This Poster is brought to you for free and open access by LVHN Scholarly Works. It has been accepted for inclusion in LVHN Scholarly Works by an authorized administrator. For more information, please contact LibraryServices@lvhn.org.

Utilizing LEAN Tools to Develop and Test Standardized Work in a Residency Clinic

Mary Stock Keister, MD Karen Taus, PMP
Lehigh Valley Health Network, Allentown, Pa.

BACKGROUND / INTRODUCTION

- High functioning primary care residency clinics share characteristics including engaged leadership, team-based care and meaningful, data-driven quality improvement.¹
- During leadership vacuums (medical, clinical, operational), residency practices are especially vulnerable to breakdowns in standardized work, performance measurement and improvement activities.

SETTING

- Urban family medicine residency program clinic within a large multi-hospital health network
- 8800 patient empanelment

METHODS

Utilizing a LEAN A3 problem solving approach, a multi-level team of faculty, clinical and clerical staff, and non-practice colleagues conducted:

- Identification of gaps and breakdowns
- Root Cause Analysis
- Countermeasure intervention design
- Evaluation design
- Pilots (forms, care team alignment, and pre-visit planning)



Figure 1: PDCA Cycle

REFERENCES

1. Gupta, R, Barnes K and Bodenheimer, T. (2016) Clinic First: 6 Actions to Transform Ambulatory Residency Training. Journal of Graduate Medical Education: October 2016, Vol. 8, No. 4, pp. 500-503
2. Feld, William M. (2001). Lean manufacturing : tools, techniques, and how to use them. Boca Raton, FL : Alexandria, VA :St. Lucie Press ; APICS.
3. Provost L, Bennett B. What's Your Theory? Driver diagram serves as a tool for building and testing theories for improvement. Quality Progress. 2015 Jul: 36-43.

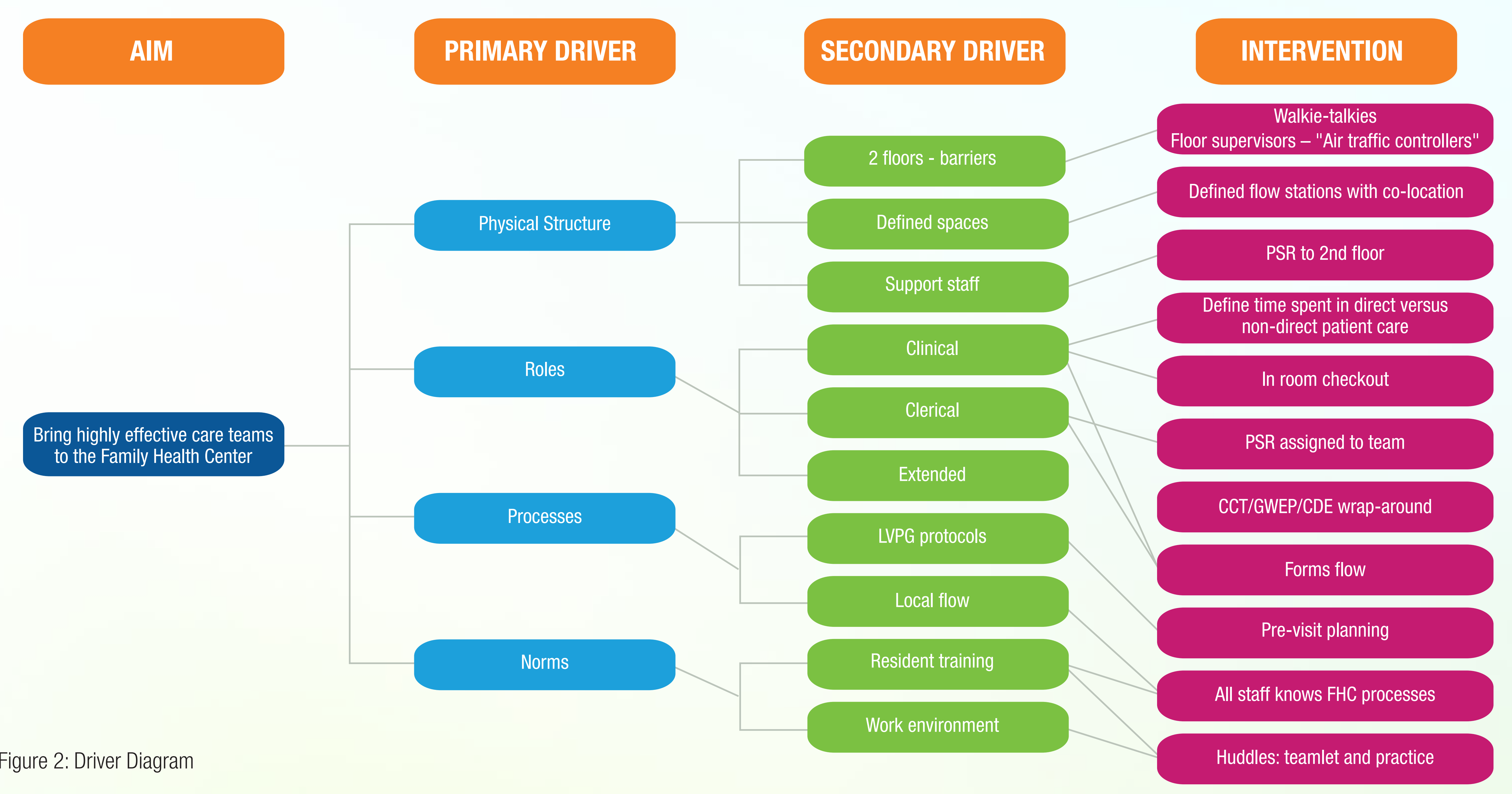


Figure 2: Driver Diagram

- It became apparent that using the LEAN A3 outline was confusing the team, as they were concentrating on process rather than problem solving. A driver diagram was introduced to clarify the primary issues the team wanted to address.

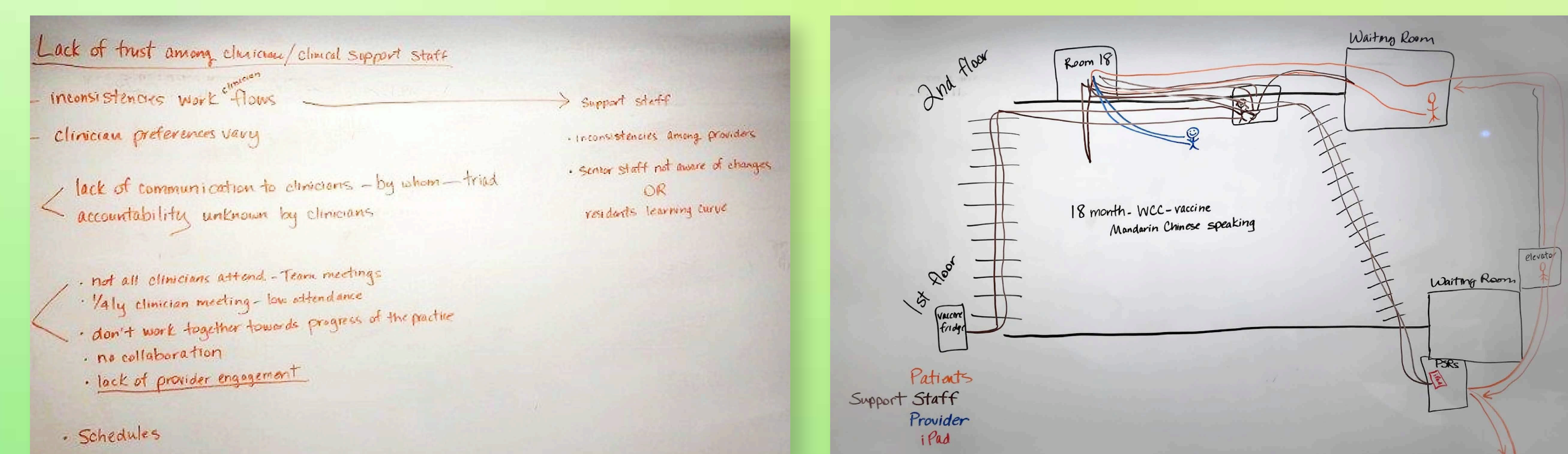


Figure 3: Planning Process

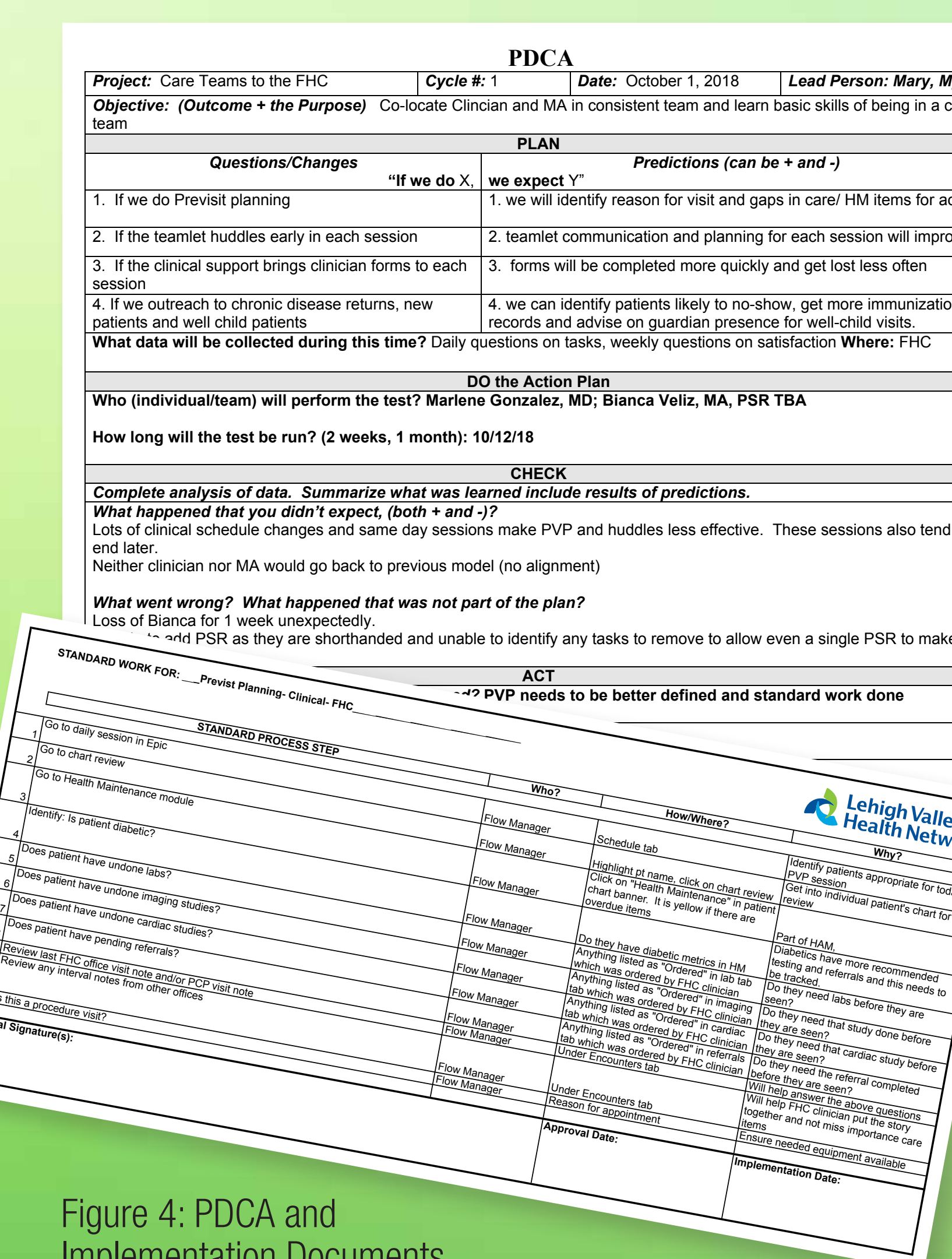


Figure 4: PDCA and Implementation Documents

RESULTS

- By the second week of PDCA in the first teamlet, previsit planning was done on 100% of daily charts
- Forms were prepped for physician in 78% on sessions
- Co-located teams members felt positive about the change on several satisfaction measures (performed weekly)

DISCUSSION

- Teamlets prefer the post-PDCA state
- Teams took greater ownership of their schedules, their forms and their patients.
- Patients are starting to notice and request teamlet staff
- Staff awaiting team assignment are starting to engage with their daily clinician more effectively, asking for huddles, because they see teams doing it
- When the process seems too big to tackle, the driver diagram helped identify areas of focus and achievable interventions.

CONCLUSION

Keys to success:

- Avoid analysis paralysis
- Don't wait for perfect team or perfect plan
- Start small
- Encourage teammates to try their own things
- Address tribal leaders and water cooler conversation

Use the change process to create standard work

- Becomes onboarding material for new hires
- Creates sustainability