



## COMPLETED GRANT SYNOPSIS

### Community Pharmacy Practice Transformation Initiative:

#### *Evaluating sustainability of patient care services*

*The ACT (Academia-CPESN Transformation) Pharmacy Collaborative*

Primary Contacts: Stefanie Ferreri and Jessica Roller

University of North Carolina Eshelman School of Pharmacy | Chapel Hill, NC

### Objectives

The goal of this study was to identify sustainability of patient care services in community-based pharmacies who completed the two-year Flip the Pharmacy (FtP) intervention in September 2021. We evaluated the sustainment of patient care services, identified the continued use of FtP intervention resources, and identified barriers and facilitators to service sustainment.

### Methods

#### Design

This was a cross-sectional web-based survey (see appendix). The survey was sent to the 488 pharmacy champions who completed cohort one of the FtP intervention. The survey was piloted prior to distribution and it was then distributed using a modified Dillman Method. The survey had 75 questions that evaluated:

- Sustainment of patient care services
  - What services were implemented or expanded during cohort one of FtP that continued?
  - What new services were initiated since completion of the FtP intervention?
- Components of the FtP resources and intervention still being used (e.g. team leads, hands-on coaching, change packages, best practice workflow webinars, eCare plan webinars, eCare plan data)
  - Team leads served as a facilitator for communication between pharmacies and the FtP coordinating center.
  - Coaches met regularly with the participating pharmacies to help troubleshoot and provide support as the implemented new services.
- Barriers and facilitators to service sustainment were based on process, staff and organizational measures from the NHS Sustainability Model.\*
  - Process measures included adaptability of the improved patient care services, benefits beyond helping patients, credibility of the benefits, and monitoring practice transformation outcomes.
  - Staff measures included behaviors toward sustaining practice transformation, clinical leadership engagement and support, senior leadership engagement and support and training to sustain practice transformation.
  - Organizational measures included fit with the pharmacy's strategic aims and culture and infrastructure for sustainability.

#### Study endpoints

- Pre- and post FtP patient care service sustainment was measured using a Chi-square test.
- Patient care services, FtP resources and sustainability scores from the NHS model were measured using descriptive statistics (e.g. frequencies, means, standard deviations). A benchmark of 80% for process, staff and organizational measures was set as a standard for success.
- Linear regression was used to identify if there was an association with high sustainability scores using the following variables: continuation of all 4 FtP services, addition of new services, continued use of all FtP resources, staffing (pharmacists + technicians)

### Results

Of the 488 eligible pharmacies, 466 had a valid champion email address and 210 completed the survey yielding a 45% response rate.

- Four patient care services were implemented or expanded during cohort one of FtP. These services were medication synchronization, hypertension, diabetes and opioid stewardship. All four services showed statistical significance of sustaining the patient care service one year after the FtP intervention. Medication synchronization services

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increased from 81% to 99% ( $p < 0.001$ ), hypertension increased from 37% to 64% ( $p < 0.001$ ), diabetes increased from 36% to 60% ( $p < 0.001$ ) and opioid stewardship increased from 23% to 69% ( $p < 0.001$ ).

- More than 60% of pharmacies continued two of the patient care services one year after completion of the FtP intervention and 41% of pharmacies continued all four patient care services. In addition, 60% of pharmacies reported implementing a new service after completing the FtP intervention. Some of the services implemented were: point-of-care testing ( $n=27$ ), COVID-19 test and treat ( $n=25$ ), flu testing ( $n=4$ ), and HIV services ( $n=2$ ).
- Pharmacies reported continued use of FtP resources and intervention components after completing the FtP intervention. Team leads were continued to be used by pharmacies 72% of the time; while 57% of pharmacies reported continuing to lean on their coach for support. Change packages and best practice workflow webinars were used most frequently with 61% of pharmacies reporting monthly use. The eCare plan webinars had 51% continued use while plan data was used at least once a month by 55% of pharmacies.
- Using the NHS sustainability model, process measures were identified to be the biggest barrier to service sustainment whereas staff measures were reported to be the biggest facilitator.
  - For process measures, one met the 80% threshold for success: credibility (84%). The other three process measure scores were benefits (79%), monitoring (70%) and adaptability (64%). The overall average for process measures was 75%.
  - For staff measures, three met the 80% threshold for success: clinical leadership (87%), senior leadership (83%), and behaviors (82%). Training received the lowest score at 73%. The overall average for staff measures was 82%.
  - For organizational measures, one met the 80% threshold for success: fit (84%). The other organizational measure score was infrastructure (74%). The overall average for organizational measures was 78%.
- The linear regression was statistically significant, demonstrating that higher sustainability scores from the NHS Sustainability Model were associated with continued use of FtP resources ( $p=0.001$ ): sum of engagement with coaches and team leads, use of change packages and eCare plan data, rewatching best practice webinars, and eCare plan instructional webinars. Continuing all four FtP patient care services ( $p=0.01$ ) as well as adding a new service ( $p=0.017$ ) were also associated with higher sustainability scores. However, staffing levels (sum of pharmacists and technicians) were not associated with sustainability scores ( $p=0.876$ ).

### Conclusion

- Community pharmacies engaged in Flip the Pharmacy demonstrated their capacity to sustain patient care services and continued use of Flip the Pharmacy resources supported their ability to sustain services.
- Clinical leadership and staff support was identified as the highest measure for service sustainment. Adaptability and process measures in community pharmacies were identified as the biggest barriers for service sustainment.
- Community pharmacies interested in expanding or implementing patient care services should consider a clinical leadership team to adopt a coaching model to overcome barriers to patient care service implementation and sustainment.

\*NHS Sustainability Model: <https://www.england.nhs.uk/wp-content/uploads/2021/03/qsir-sustainability-model.pdf>