

INTRODUCTION

- Interprofessional teams improve the quality, safety, and efficacy of healthcare, making interprofessional education models important¹
- Effective preventative health interventions across all health settings require health professionals outside of the traditional public health field to be well trained in population health management²
- There is limited evidence of success in training health professional students to perform population health management-based quality improvement (QI) interventions as an interprofessional team
- Statin use is recommended in patients 40+ years of age with diabetes and one additional risk factor to decrease cardiovascular risk according to the 2016 American Diabetes Association and the 2013 American Heart Association guidelines³
- A multidisciplinary family medicine clinic aimed to achieve a 74.7% statin use rate in patients 40+ years of age with diabetes by June 2016, but had a statin use rate of 57.3% as of December 2015
- A study was conducted to identify factors affecting statin underuse in a multidisciplinary family medicine clinic using an interprofessional team-based QI approach

METHODS

Cohort Demographics

- Interprofessional team of students included:
 - 3rd year pharmacy students (n=3)
 - 2nd year medical students (n=2)
 - Final year nursing students (n=2)
 - Final year public health students (n=1)
 - Final year social work students (n=1)

Student Experiences

- Students completed the pilot population health management course and immersion experience together as a team

Population Health Management Course	Immersion Experience
<ul style="list-style-type: none"> • 13 week hybrid course • 6 online modules • Monthly face-to-face class sessions 	<ul style="list-style-type: none"> • 13 week shadowing period • Shadowed and interviewed 13 healthcare providers and support staff

Data Collection

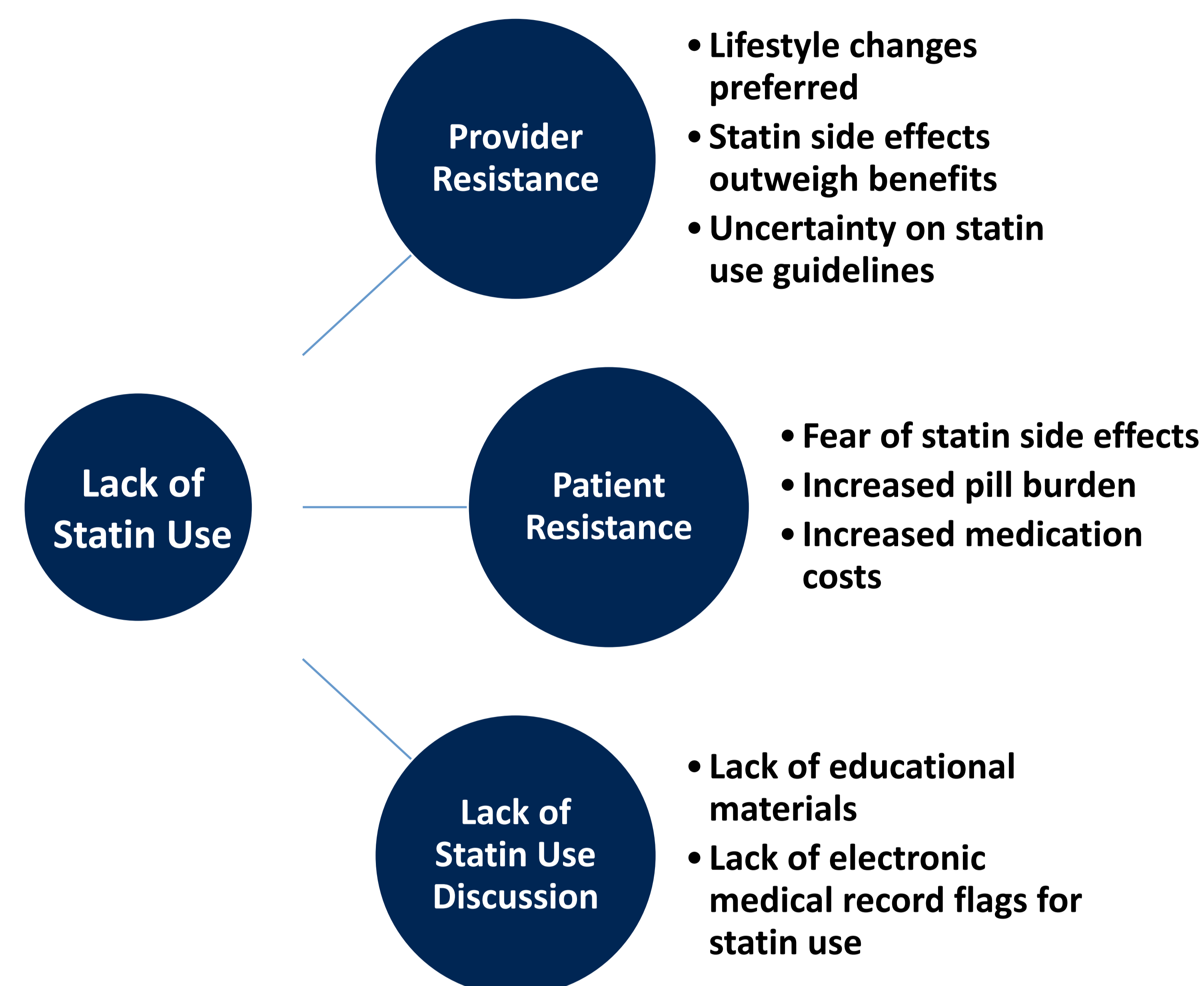
- Students used the Ottawa Decision Guide to interview healthcare providers and support staff⁴
- Students recorded subjective observational notes on individual assessment forms during the immersion experience
- Statin use statistics were measured and evaluated based on the University of North Carolina Physician's Network's standards⁵

Data Analysis

- Team-based qualitative analysis was used to identify themes and factors impeding statin use
- Factors that could be influenced by the team were prioritized with the Primary Care Collaborative Quality Measures Reporting Guide⁵

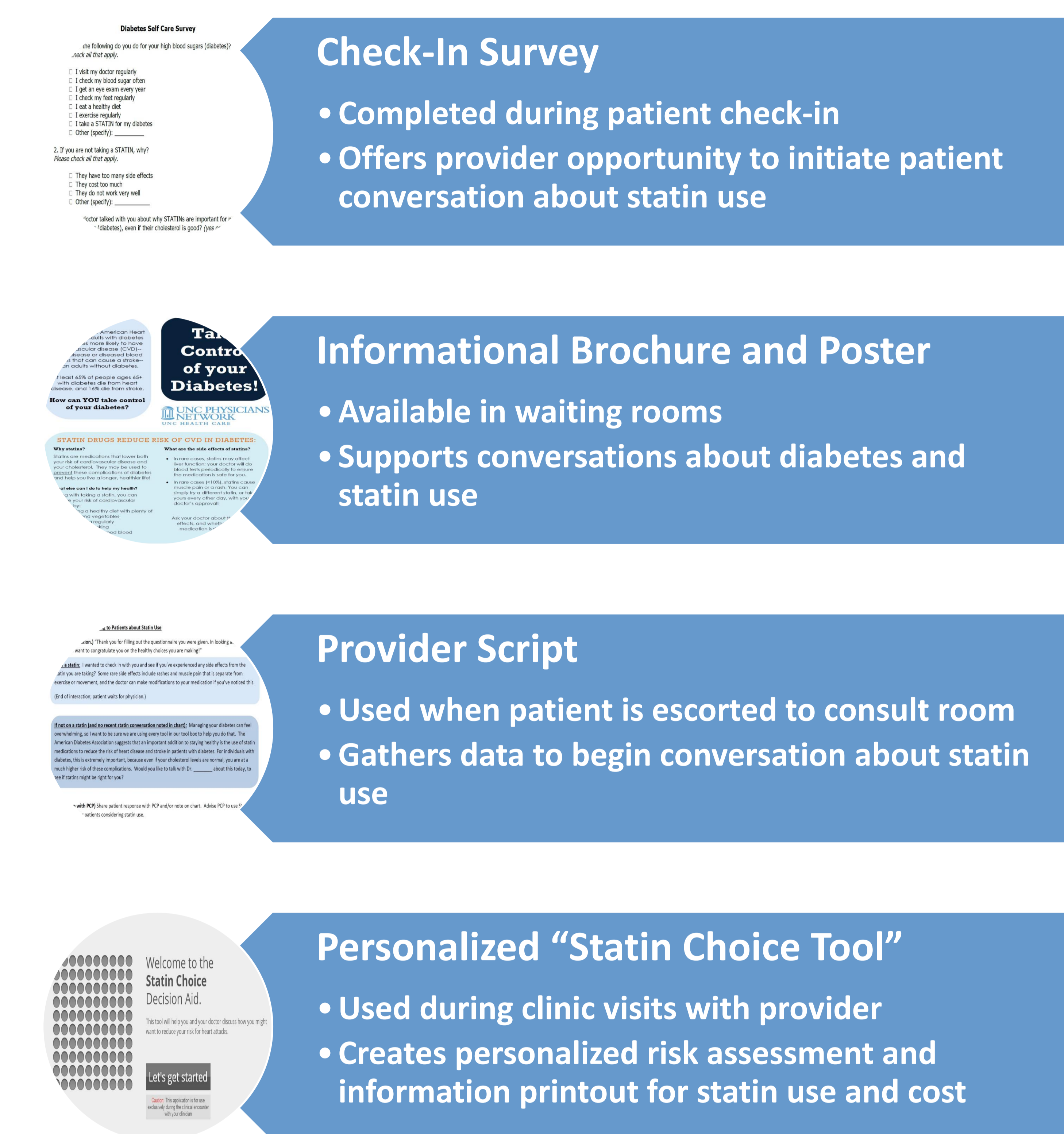
RESULTS

FIGURE 1 Qualitative results of needs assessment



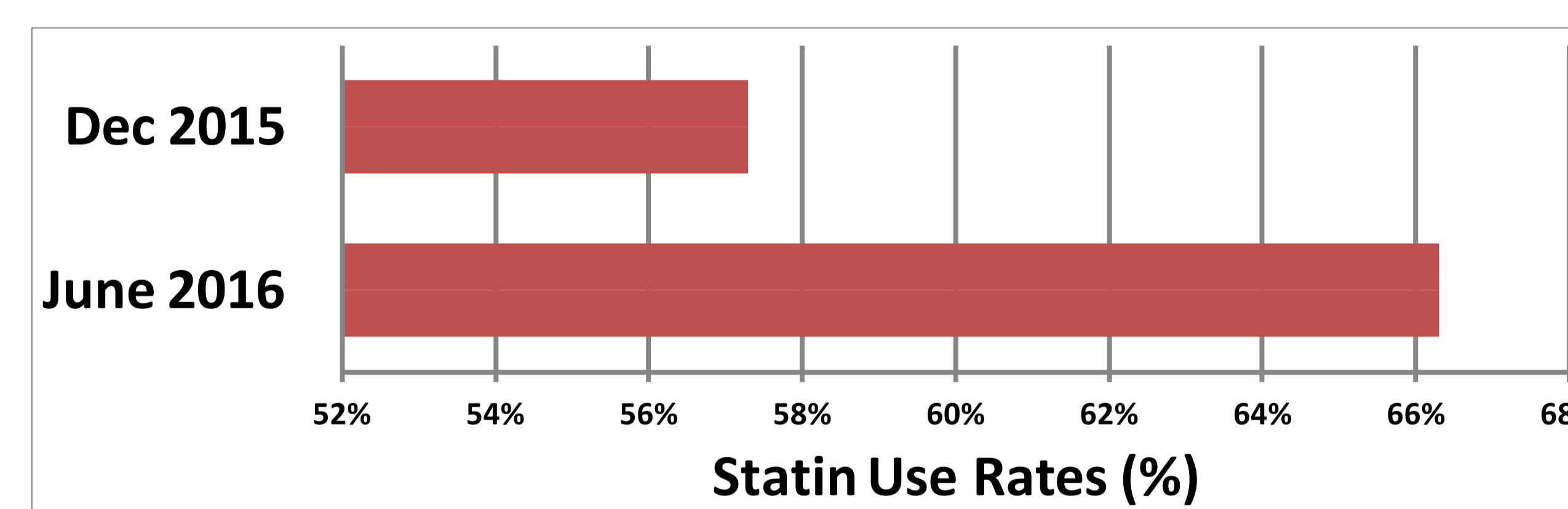
- Primary concerns identified by the needs assessment:
 - Patient knowledge on the benefits of statin use
 - Provider knowledge on the benefits versus side effects of statin use

FIGURE 2 Recommended multi-tiered intervention to aid patients and providers in statin use decisions



- Check-In Survey**
 - Completed during patient check-in
 - Offers provider opportunity to initiate patient conversation about statin use
- Informational Brochure and Poster**
 - Available in waiting rooms
 - Supports conversations about diabetes and statin use
- Provider Script**
 - Used when patient is escorted to consult room
 - Gathers data to begin conversation about statin use
- Personalized "Statin Choice Tool"**
 - Used during clinic visits with provider
 - Creates personalized risk assessment and information printout for statin use and cost

FIGURE 3 Comparison of statin use rates in patients 40+ years of age with diabetes before and after implementation of recommendations



- Preliminary statistics were evaluated in December 2015 and final statistics were evaluated in June 2016
- All recommended interventions EXCEPT the statin choice tool were successfully implemented in April 2016
 - Statin choice tool was not implemented due to provider resistance
- Statin use rates in patients 40+ years of age with diabetes increased by 9% (from 57.3% to 66.3%) after 2 months

CONCLUSION

- The 13-week pilot course was successful in training an interprofessional team of students to complete a needs assessment and then provide recommendations as part of a QI project within the community
- The QI plan developed by an interprofessional team of students as part of a population health management course was effective
- Continued efforts are needed to further address provider resistance to further improve statin use rates

REFERENCES

1. Reeves S, Perrier L, Goldman J, Freeth D, Zwarenstein M. Interprofessional education: effects on professional practice and healthcare outcomes (update). *Cochrane Database Syst Rev.* 2013;(3):CS002213.
2. Zenzano T, Allan JD, Bigley MB et al. The roles of healthcare professionals in implementing clinical prevention and population health. *Am J Prev Med.* 2011; 40(2):261-267.
3. American Diabetes Association. Cardiovascular Disease and Risk Management. In: 2016 Standards of Medical Care in Diabetes. *Diabetes Care.* 2016;39:S60—S71.
4. O'Connor AM, Stacey D, Jacobsen MJ. Ottawa Personal Decision Guide. Ottawa Hospital Research Institute & University of Ottawa, Canada. 2015.
5. University of North Carolina Physician's Network. Primary Care Collaborative Quality Measures Reporting Guide. Chapel Hill, NC: 2016.

DISCLOSURES

Authors of this presentation have the following to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation: Jennifer Ku, PharmD Candidate: Nothing to disclose. Trang Leminh, PharmD Candidate: Nothing to disclose. Payal Patel, PharmD Candidate: Nothing to disclose. Meg Zomorodi, PhD, RN: Nothing to disclose. Nicole R Pinelli, PharmD, MS: Nothing to disclose.