

Reducing Emergency Department Use and Improving Health Outcomes by Co-Locating an Oral Health Provider in a Hospital Setting

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Background

The high incidence of Emergency Department (ED) utilization for dental pain and higher risk of nosocomial pneumonia in hospitalized patients prompted Capitol Dental Care and Samaritan Lebanon Community Hospital to co-locate an Expanded Practice Dental Hygienist (EPDH) into the hospital setting to provide assessments, oral care, and navigation throughout the hospital.¹

Objectives

- Provide oral health services for patients to improve oral and overall health
- Prevent use of ED for non-traumatic dental pain
- Create interdepartmental relationships between hospital departments and EPDH
- Explore modes of sustainability

Implementation

Our Expanded Practice Dental Hygienists (EPDHs) provide oral health care and education for hospital patients and staff to improve oral health outcomes for hospital patients in three hospitals. In addition to providing oral health expertise, EPDHs assist hospital teams with their oral health protocols for inpatients⁴, improve referral resources for the care coordination teams, teach oral health education classes for outpatients, and may reduce nosocomial pneumonia rates.³ Utilizing teledentistry and palliative dental treatment, patients presenting with dental pain in the emergency room and throughout the hospital receive timely dental care. In addition, outpatients receiving services in the hospital who are pregnant, have diabetes, and who get infusions for cancer treatment are also provided dental care.

Methods

Created system of documentation and referrals in both hospital EHR and dental EHR
Created list of community dental resources
Created comprehensive implementation guide for replicability

EXPANDED PRACTICE DENTAL
HYGIENIST-HOSPITALIST
IMPLEMENTATION GUIDE

Teaches oral health classes for outpatients and in-services for hospital staff
Provides palliative and preventive oral care for patients in ICU, PCU, ACU and ED



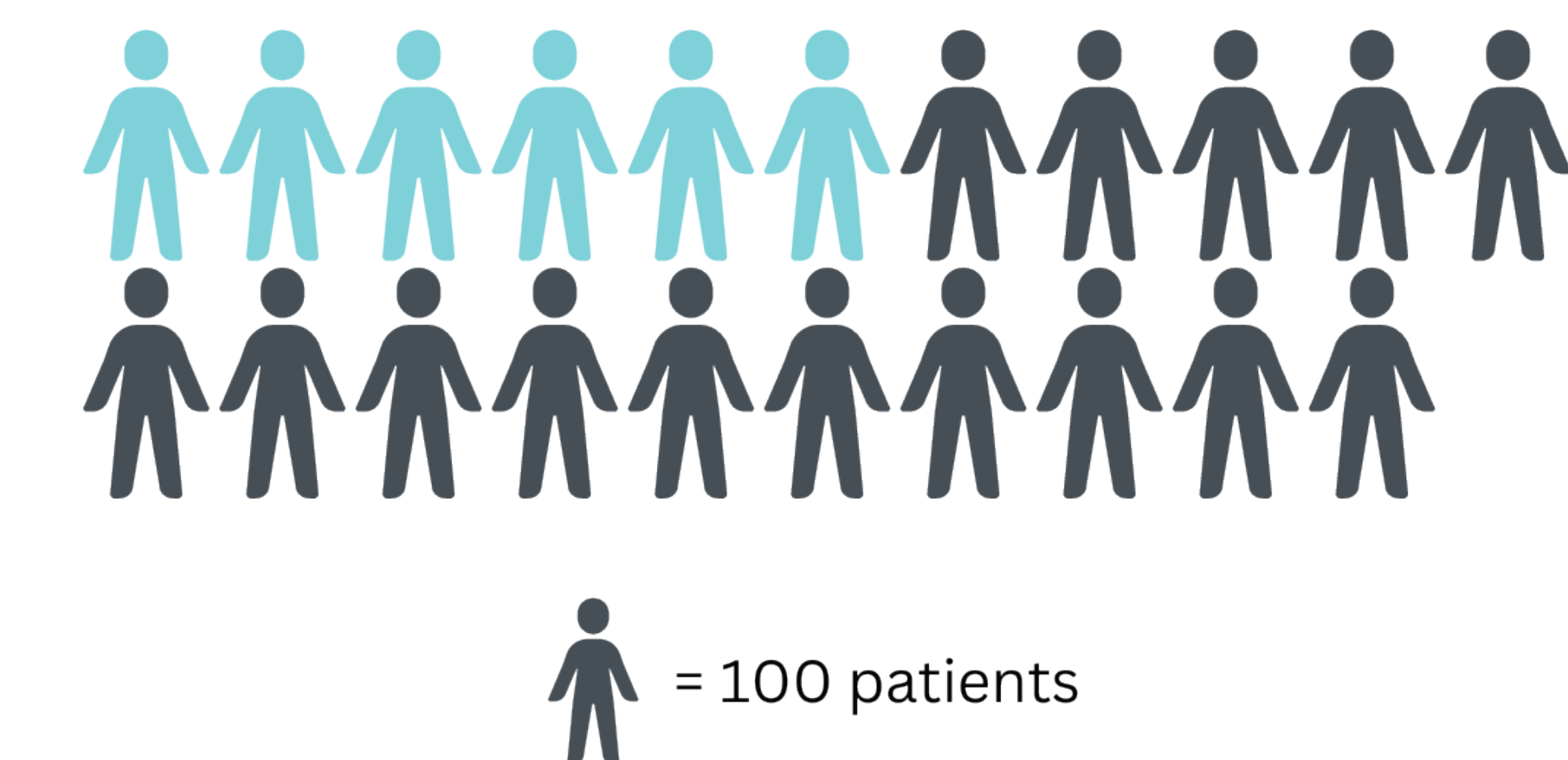
Provides oral health expertise and consultation for hospital staff



Utilize teledentistry to streamline referrals

Results/Considerations

- Patient surveys showed 91% extremely satisfied with dental visit during hospital stay and 82% would implement changes discussed during dental visit (71 respondents)
- 100% of hospital staff strongly agreed that patient quality of care improved when they received a dental care visit in the hospital (11 respondents)
- Out of the 2100 patient visits, 660 were provided referrals for comprehensive dental care.



ED tracking ED utilization for all three hospitals - trends inconclusive since projects are recent and COVID-19 affected one data set.

Sustainability -

- Currently under HRSA Grant for 2/3 hospital sites
- Considering data to show hospital savings by having an oral health provider - decrease in in ED physician time, less readmissions to hospital from pneumonia, lower hospital stays by increase in daily oral health provided,² fewer patients visiting ED for dental pain

Research

¹Samaritan Emergency room data 2014-2017 file:///H:/CCOs/IHN/Pilot%202019/research/Emergency%20Room%20Utilization%20Data%20for%20NTDC.pdf

²Hospital Acquired Infections; Alberto F. Monegro; Vijayadershan Muppidi; Hariharan Regunath. <https://www.ncbi.nlm.nih.gov/books/NBK441857/>

³Oral Microbes in Hospital-Acquired Pneumonia: Practice and Research Implications; Kimberly Paige Rathbun 1, Annette M Bourgault 2, Mary Lou Sole 3. Crit Care Nurse. 2022 Jun 1;42(3):47-54. doi: 10.4037/ccn2022672

⁴Nonventilator hospital-acquired pneumonia: A call to action. Recommendations from the National Organization to Prevent Hospital-Acquired Pneumonia (NOHAP) among nonventilated patients. Published online by Cambridge University Press: 09 June 2021