

Level of Implementation

- Group
- Practice
- Future: dentist

Target Populations

- Adults
- Children

Improvement Goals

- Develop caries risk assessment instrument
- Credential protocols, obtain peer approval
- Integrate tool into practice
- Increase policy and protocol adherence
- Increase the number of patients with caries risk assessment and risk-based care plans
- Achieve sustained spread of tool integration

Essential Partners

- Patients, families, communities
- Cross-functional - leadership
- Front-Line Clinical Teams and Administrative Staff
- Clinical exemplars, thought leaders and organizational champions
- Dentists, dental hygienists, dental assistants, practice staff

Key Measures

- Caries risk assessment instrument integration by practices and by dentists
- Follow-on goal: establish caries risk assessment registry to help quantify risk
- The number and percentage of patients with documented caries risk assessment

Measurement Data Source

- Electronic Health Record
- Practice and Group Data

DQA Quality Innovators Spotlight: *The Inside Story*

How did this project start?

Project purpose. The purpose of this quality improvement project was to plan, develop, test, implement, evaluate, integrate and disseminate a personalized care, caries risk assessment instrument for children in a practice environment.

Problem identification. Caries is a chronic condition affecting both children and adults. Despite evidence-based guidelines and years of research, not all dentists use a risk assessment tool when making personalized care decisions. In addition, the results of risk assessment often are not documented.

Quality improvement initiative. A caries risk assessment instrument was developed, tested and integrated at ForwardDental Group employing a social operating system and quality improvement/assurance infrastructure design in accord with Accreditation Association for Ambulatory Health Care. This project focused on children with plans to expand to adults.

Improvement goal. The goal of this program is to integrate and spread a caries risk assessment instrument into the group practice at ForwardDental Group.

What were the key strategies to achieve the improvement goal?

The key strategies included:

- ❖ Establishing a collective mission, cohesive alignment and constancy of purpose circumscribing the group practice, project and patient.
- ❖ The group practice social operating system (means of communication) governance, directed committees and practice meetings are aligned with the mission. All meetings begin with a recitation of the mission; all discussion aligns to the purpose.
- ❖ The group practice governance, leadership and quality functions vet, credential and monitor all project plans, strategy, objectives and policies.
- ❖ Key stakeholders know and understand the why, when, where, and how of the project. Key stakeholders understand their roles and responsibilities to the project as well as responsibilities to essential partners, particularly front-line teams and patients.
- ❖ Project teams are cross-functional, aligned to the project mission absent internal work or practice boundaries and purposefully diverse. Everybody is equal, every idea is given consideration, respectful debate is encouraged, and every voice is dignified and counts.

What improvements were achieved?

The dental group extended this initiative by launching a caries risk assessment registry to support clinical decision making, assist with the assessment and documentation of caries risk, and increase clinical team and patient engagement (Ruff et al. 2017). In the initial two pilot practice sites, the percentage of children with new patient or recall exams who had CRA documented increased from 57% in January 2016 to 92% in April 2017 (Ruff et al. 2017). As of 12/31/2017, following expansion to additional practice sites, 27,406 child patients were risk assessed at ForwardDental, representing 92 percent of children with new patient or recall exams.

What were the main challenges that needed to be overcome?

- ❖ Legacy systems and thinking: acquisition of and adjustment to re-engineered technology; apprehension of new methodologies
- ❖ Normative culture, tradition, routine, extant programming: adaptation to new role responsibilities, accountabilities, processes, culture, and rewards
- ❖ Normative practice, flow and throughput: modification, addition and or subtraction of re-designed procedures, clinical practices, and re-alignment of incentives
- ❖ Calibration: communications — education, messaging-consistency, constancy of training and education; constancy of understanding and interpretation
- ❖ Fear of change, powerlessness, loss of control and autonomy: adjusting to re-defined roles

What was the overall impact of the program?

The following are the key accomplishments:

- ❖ **Group Practice:** Over 29 practice sites employ the caries risk assessment instrument.
- ❖ **General Dentists, Pediatric Dentists, and Dental Hygienists:** Over 80 general and pediatric dentists and 130 dental hygienists used the caries risk assessment instrument.
- ❖ **Patients:** 27,406 child patients were risk assessed.
- ❖ **Opportunity Cost/Benefit:** Every organizational decision to engage in a project comes down to a choice about the employ, re-engineer, re-design and/or prioritization of invaluable resources (e.g., people, technology, systems, processes, functions, time and money) along with the potential for gain or loss if the choice were made to the alternative. The social capital of ForwardDental was allocated to the project because both the leadership and frontline clinical teams made a collective commitment to the mission—in the best interests of the patient. That the group realized a tangible return on its social capital is evidenced by the decision to spread and scale the project.

More Information

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Ruff, J. C., Herndon, J. B., Horton, R. A., Lynch, J., Mathwig, D. C., Leonard, A. and Aravamudhan, K. (2017), Developing a caries risk registry to support caries risk assessment and management for children: A quality improvement initiative. *Journal of Public Health Dentistry*.doi:10.1111/jphd. 12253.



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OPINION: How can we spread this change?

The Personalized Care: Caries Risk Assessment quality improvement initiative demonstrates how an individual or group practice can collectively engage practice location(s) and their clinical care teams improve patient care by developing, implementing and sustaining a collectively purposeful infrastructure, social operating system and means of support. Provider buy-in is created by engaging the eventual adopters of the improvement strategy as key stakeholders and co-developers of the improvement processes, tools and supports. Similar models can be adopted by individual, group practice, community health centers, academic or other oral health/ integrated delivery models.

The opinions expressed in this section are those of the DQA's Implementation and Evaluation Committee based on their individual expertise and experiences.