Supplemental Digital Appendix 1

Health Care Improvement Portfolio

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|--|--|--|--|
| Personal Statement (Include an overall self-assessment of your role in health care improvement, including quality improvement, patient safety, and/or innovation. See bullets below for criteria to consider.) | | | |
| Elements | Criteria | | |
| Contribution | What are your main areas of focus for health care improvement? How have you contributed to this work, both as a leader and a collaborator? What has been the impact of this work – on patients, processes of care, health systems, etc.? How have you furthered the field of health care improvement through collaborative partnerships within a clinical setting, formal academic role(s), or individual mentoring? How have you sustained your work? How have you disseminated your work beyond your local context? | | |
| Reflection | What goals have you achieved? How has failure influenced your work? What are your plans for the next phase of your work? | | |

| Health Care Improvement Training and Certification (Formal health care improvement training programs you have completed as a learner.) | | | | |
|--|---|---|--|--|
| Dates | Training Received | Outcome of training | | |
| Title of training | | | | |
| • Date(s) | Description of training Format (online, in-person) Time commitment Documentation of completion (i.e., certificate of participation/completion, course grade, degree) Certifying institution | Skills acquired (i.e., improvement methods, leadership, interprofessional communication, analytics, informatics, statistics, qualitative/survey methods, evaluation, etc.) Where/how you applied the training Dissemination of training to others | | |

| Leadership and Administrative Roles (Roles where you had leadership responsibility over program initiation, planning, and implementation or were a member of a committee where you made a direct impact on the specific programs in your field.) | | | |
|--|--|--|--|
| Dates | Description | Achievements (Examples Below) | |
| Position title | | | |
| • Dates | Description of role Area of responsibility Scope (local, regional, national, international) Goals of program Personal contribution Diversity of team (i.e., inclusion of key stakeholders such as other professions, patients, community members) | Sustained changes New procedures and/or policies established Impact on safety, quality, and value of care for patients Protocols created/streamlined New team(s)/department(s) initiated Collaborations established Significance of achievement(s) | |

| (Projects that you ma an impact on a well-o | rovement Project Activities Indee a significant contribution to, even if you did not take of Idefined area of health care improvement within either you | ur department or your institution.) |
|--|---|--|
| Dates | Description | Impact (Examples Below) |
| Title of project | | |
| • Dates | Description of your role on the project Define the problem Aim of the project Overview of methods Diversity of team (i.e., inclusion of key stakeholders such as other professions, patients, community members) Unique contribution you made to the project Grant funding, if applicable | Improved outcomes in safety, quality, and/or care for patients Operational and/or clinical impact (i.e., increased efficiency, reduced waste or cost, return on investment) Enhanced patient experience Improved provider satisfaction Sustainability of project Spread/scale of project to other departments, institutions, health systems Resulting scholarship (i.e., peerreviewed publications, abstracts, and presentations) Resulting recognition in the press/media Policy implications |

| Health Care Improvement Coaching, Teaching, and Curricular Activities (Direct teaching/training you have delivered and coaching/mentoring activities you have performed. As applicable, also include curriculum development and/or creation of enduring educational materials for teaching health care improvement.) | | | | |
|---|--|--|--|--|
| Dates | Description | Impact (Examples Below) | | |
| Title of activity | | | | |
| • Date(s) | Description of your role Duration of activity (one-time lecture, workshop, seminar) Setting of activity (face-to-face, online, etc.) Objectives of activity/materials Description of materials created Target group, size and diversity of class (med students, residents, nursing students, etc.) Level of learner (faculty, trainee, etc.) Grant funding, if applicable | Learner satisfaction with education/training Student outcomes (i.e., knowledge/skills/attitudes, improvement project completion, etc.) Mentee outcomes Dissemination/sustainment of training/education/materials Resulting scholarship (i.e., peerreviewed publications, abstracts, and presentations) | | |

| Health Care Improvement Honors, Awards, and Recognition (Recognition for your outstanding work in Health care Improvement; this can include honors and awards for leadership, project work and/or teaching as well as invited, external committee membership, advising and consulting roles, participation in a study section/task force, society or section officer, and/or meeting chair.) | | | | | |
|---|--|------------------------|--|--|--|
| Dates | Description Achievement | | | | |
| Title of honor, awar | Title of honor, award, or recognition | | | | |
| • Date(s) | Organization Criteria for selection Description of honor, award, recognition Local, regional, national or international achievement | Achievement recognized | | | |

Supporting Documents

Include your curriculum vitae with your submission.

Include the 3-4 artifacts as an appendix that best represent your contributions to health care improvement, as described in your personal statement. Optional items to include in an appendix include:

- Examples of scholarships: curricula, publications, presentations
- Media/press releases
- Letters of support from local leaders showing impact
- Letter of support from leaders outside your institution who have adopted your intervention/innovation
- Letters of recommendation
- Learner evaluations of teaching
- Curriculum assessment tools

Updated and downloadable versions of this template can be found at https://baylorqips.org/improvement-portfolio/.

Supplemental Digital Appendix 2

Competed Health Care Quality Improvement Portfolio (Excerpted)

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A: Personal Statement

I am a highly organized and self-driven individual, passionate about taking care of patients on the health care system macro level and developing my career in the field of health care epidemiology. My leadership commitment can be gauged by the fact that I hold an MBA (health care management) from the University of Arizona and a Certificate in Safety, Quality, Informatics and Leadership from Harvard Medical School. Possessing over five years of experience of working in academic health care leadership positions, as the medical director of antimicrobial stewardship then infection prevention, I have gained extensive insight within this field. My key leadership competencies include, but are not limited to, physician leadership, developing quality programs, risk assessment and hospital regulatory compliance.

As the medical director of infection prevention and antibiotic stewardship, I am accountable for leading a team of 8 infection preventionists and carrying out a wide range of responsibilities to improve hospital-acquired infection rates. I oversee antibiotic and diagnostic stewardship, outbreak management, surveillance, disaster preparedness, quality improvement and research. As the medical director of infection prevention, I am a skillful communicator, with excellent organizational, decision making and time management skills. I have a proven track record of consistently meeting regulatory requirements as evidenced by previous regulatory surveys. Some of my accomplishment in this position includes: marked reduction of *Clostridium difficile* infections (53%) by using a new bundle, reduction of colorectal and orthopedic surgical site infections after implementing two new checklists, and establishing new subcommittees for hand hygiene, methicillin-resistant *Staphylococcus aureus* bacteremia, ventilation-associated pneumonia and orthopedic surgical site infections. Currently, all hospital-acquired infections are now either similar or better than national average.

Educating medical students, residents, fellows and other faculty members is my passion. I have developed a one-month rotation for the infectious disease fellows in infection prevention and antibiotic stewardship and a one-year track for second and third year infectious disease fellows in infection prevention, antibiotic stewardship, quality improvement and leadership. I am an active member of the Vice Chair Group for the Department of Medicine for Quality Improvement that aims to improve quality training for faculty and fellows at BCM. I also give regular lectures to medical students, residents and fellows regarding appropriate antibiotic use and infection prevention and I am involved in developing enduring education material to all trainees regarding antibiotic use, microbiology and infection prevention.

B: Health Care Improvement Training and Certification (selected)

| (Formal health care improvement training programs you have completed as a learner.) | | | | | |
|---|--|--|--|--|--|
| Certificate Professional of Health care Quality (CPHQ) | | | | | |
| National Association of Health care Quality | | | | | |
| Dates | Certificate Description | Outcome | | | |
| 10/2018 | The CPHQ incorporates the body of knowledge in the profession including: strategic and operational roles in management and leadership information management, including design and data collection, measurement and analytics, and communication performance/quality measurement and improvement, including planning, implementation and evaluation, and training strategic and operational tasks in patient safety Documentation of completion: Passed the certifying exam Certifying institution: National Association of Health care Quality (NAHQ) | Demonstrated skills in patient safety, and quality Showed preparedness to improve outcomes across continuum of care | | | |

C: Leadership and Administrative Roles (selected)

(Roles where you had leadership responsibility over program initiation, planning, and implementation or were a member of a committee where you made a direct impact on the specific programs in your field.)

| Medical Director- Infection Prevention | | | | | |
|---|---|---|--|--|--|
| Baylor St. Luke's Medical Center, Houston, TX | | | | | |
| Dates | Description | Achievements (Examples Below) | | | |
| 02/2017- Present | Works collaboratively with other departments and service lines to ensure alignment with organization goals and successful outcomes Serves as a role-model for Infection Prevention staff and physicians Partners with the Infection Prevention Director, establishes and drives the hospital Infection Prevention Plan and related strategies Networks with Society of Hospital Epidemiology of America (SHEA) and other professional organizations to ensure the hospital is working proactively to anticipate changes Utilizes epidemiology to proactively identify patients and staff at risk for infection Develops appropriate techniques for surveillance, reporting and reporting of infections | Marked reduction of Clostridium difficile infections (53%) with a new bundle Reduction of colorectal and orthopedic surgical site infections after implementing two new checklists All hospital-acquired infections are now either similar or better than national average Established new subcommittees for hand hygiene, MRSA bacteremia, ventilation-associated pneumonia and orthopedic surgical site infections No major infection prevention-related citations during last regulatory visits Collaboration established with several local and national collaborators | | | |

D: Health Care Improvement Project Activities (selected)

(Projects that you made a significant contribution to, even if you did not take on any formal leadership roles. Projects should make an impact on a well-defined area of health care improvement within either your department or your institution.)

| Title: Using Informatics to Improve Antibiotic Stewardship And Catheter-Associated Urinary Tract Infections | | | | |
|---|----|--|----|----------------------------------|
| (CAUTI) | | | | |
| Dates: | De | escription: | lm | pact: |
| 01/2018- | • | Role: Champion | • | Collaboration established with |
| Present | • | Scope: Regional (CHI-all hospitals in Texas division) | | Dr. Trautner at MEDVAMC and |
| | • | Project description: This project includes creating and | | the Houston Health Department |
| | | order set to limit ordering urine cultures. This order | • | New procedures to order |
| Time | | set includes: 1) directing prescribers to the right test | | urinalysis and urine cultures |
| spent: 50 | | (urinalysis with reflex for patients with suspected | | were created (went live |
| hours/ | | infection, plain urinalysis when infection is not | | 06/2018) |
| year | | suspected, and urine culture for screening purposes or | • | The number of urinary cultures |
| | | in neutropenic patients) 2) requiring physicians to | | performed has decreased by |
| | | select a urinary symptom when ordering urine cultures | | 54% after implementation |
| | | for infectious reasons, 3) changing the criteria of | • | We are evaluating the impact of |
| | | urinalysis reflex to culture to increase specificity 4) | | this order set on CAUTI rate and |
| | | remove all other standalone test | | antibiotic stewardship. From |
| | • | Personal contribution: I led communication with key | | historic data, we estimate that |
| | | stakeholders across several hospitals. This was done | | 25% of CAUTI at BSLMC |
| | | through meetings and written communication. I | | were due to false positive urine |
| | | worked with IT to develop the new order set and | | culture (with urinalysis<10 WBC) |
| | | monitor outcomes. | • | The order set has an additional |
| | • | Diversity of team: hospital leadership (Sponsor COO | | indirect impact on hospital |
| | | Dr. David Berger), microbiology, pharmacy, infection | | finances as CAUTIs count |
| | | preventionists, nursing, infectious disease faculty, | | towards the Centers for |
| | | emergency, hospitalists and intensivists | | Medicare and Medicaid (CMS) |
| | | | | penalty system under the value- |
| | | | | based purchasing (VBP) and |
| | | | | hospital acquired condition |
| | | | | reduction program (HACRP) |

| Title: Weekly Tissue Plasminogen Activator (tPA) For the Prevention of Central Line-Associated Bloodstream | | | | | |
|--|--------------|--|----|-------------------------------------|--|
| Infections (CLABSI) In Patients With End-Stage Renal Disease (ESRD) On Hemodialysis (HD) | | | | | |
| Dates: | Description: | | Im | Impact: | |
| 08/2017- | • | Role: Champion | • | Collaboration established with Dr. | |
| Present | • | Scope: Local (BSLMC) | | Leonard Mermel (medical | |
| | • | Project description: The majority of our CLABSI at | | director of infection prevention | |
| Time | | BSLMC were in the cardiothoracic transplant ICU and | | at Brown University) | |
| spent: 40 | | step down, and particularly in patients with ESRD on | • | New procedures to identify high | |
| hours/ | | HD. The goal of this project was to use weekly tPA for | | risk patients in the cardiothoracic | |
| year | | prevention on CLABSI in ESRD patients on HD. This | | transplant units | |
| | | project includes creating a protocol to identify | • | Implementation started 03/2018 | |
| | | patients at risk and creating templates for | • | The number of CLABSI in the two | |
| | | administering tPA | | cardiothoracic transplant units | |
| | • | Personal contribution: I worked with nephrology to | | has decreased from 7 cases in | |
| | | create protocols and led communication with key | | 2017 to zero (3 months after | |
| | | stakeholders across BSLMC | | implementation) | |

| • Diversity of team: hospital leadership (Sponsor: Dr. | The order set has an impact on |
|--|---------------------------------|
| Timmins, Chief of nephrology), pharmacy, infection | hospital finances. Each CLABSI |
| preventionists, and nursing | costs the hospital between |
| | \$22,000-45000. Additionally, |
| | CLABSIs have indirect costs as |
| | they count towards the Centers |
| | for Medicare and Medicaid (CMS) |
| | penalty system under the value- |
| | based purchasing (VBP) and |
| | hospital acquired condition |
| | reduction program (HACRP) |

E: Health Care Improvement Coaching, Teaching and Curricular Activities (selected)

(Direct teaching/training you have delivered and coaching/mentoring activities you have performed. As applicable, also include curriculum development and/or creation of enduring educational materials for teaching health care improvement.)

| Infection Prevention and Antibiotic Stewardship Curriculum for second-year infectious disease fellows | | | | |
|---|--|---|--|--|
| Dates | Description | Achievements (Examples Below) | | |
| 02/2018- present | Organized a series of advanced lectures (total of 8) for 2nd and 3rd infectious disease fellows as part of their infection prevention, antibiotic stewardship, quality and leadership This included interactive workshops on working as a team, hospital leadership and management, hospital epidemiology, and antibiotic stewardship | We will be evaluating the curriculum through learner evaluations Positive comments from participants | | |

F: Health Care Improvement Honors, Awards, and Recognition (selected)

(Recognition for your outstanding work in Health care Improvement; this can include honors and awards as well as invited, external committee membership, advising and consulting roles, participation in a study section/task force, society or section officer, and/or meeting chair.)

| President, Houston Infectious Disease Society | | |
|---|---|---|
| Houston, TX | | |
| Dates | Description | Achievement |
| 08/2018-Present | This society provides continuing medical education to medical students and doctors with an interest in clinical infectious disease and act as a forum for the exchange of ideas | Selected as society president given expertise in leadership, antimicrobial stewardship and epidemiology |