

Quality and Productivity Commission
28th Annual Productivity and Quality Awards Program
"Los Angeles County: Ahead of the Curve"

2014 APPLICATION

Title of Project (Limited to 50 characters, including spaces, using Arial 12 point font):

NAME OF PROJECT: Percutaneous Dilatational Tracheostomy Program

DATE OF IMPLEMENTATION/ADOPTION: 10/04/2011
 (Must have been implemented at least one year - on or before June 30, 2013)

PROJECT STATUS: Ongoing One-time only

HAS YOUR DEPARTMENT PREVIOUSLY SUBMITTED THIS PROJECT? Yes No

EXECUTIVE SUMMARY: Describe the project in 15 lines or less using Arial 12 point font. Summarize the problem, solution, and benefits of the project in a clear and direct manner.

In October 2011, the Division of Pulmonary & Critical Care Medicine at Olive View Medical Center launched a Percutaneous Dilatational Tracheostomy (PDT) program. PDT is a minimally invasive bedside procedure in which a tracheostomy tube (long-term breathing tube) is placed without direct surgical visualization of the trachea. Historically, inpatients hospitalized in the Intensive Care Unit (ICU) who required long-term ventilator support underwent Standard Tracheostomies (ST) under the care of the ENT (Ear, Nose, and Throat) service in the Operating Room (OR). In contrast, PDTs are performed safely and efficiently at the patient's bedside in the ICU by the Medical Intensives team. The PDT program has allowed tracheostomies to occur earlier than STs, thus diminishing the wait time for the procedure. In addition, there is a significant reduction in resources: ENT is not consulted, Anesthesia services are not utilized, OR time and space are not needed, ICU & hospital length of stay are reduced. If we extrapolate from published research on the cost savings per patient of bedside PDT versus surgical PDT, there is an estimated net savings of \$3571 per patient. As we perform about 8 PDTs per year, the annual estimated cost savings is \$28,568.

(1) ACTUAL/ESTIMATED ANNUAL COST AVOIDANCE	(2) ACTUAL/ESTIMATED ANNUAL COST SAVINGS	(3) ACTUAL/ESTIMATED ANNUAL REVENUE	(1) + (2) + (3) = TOTAL ANNUAL ACTUAL/ESTIMATED BENEFIT	SERVICE ENHANCEMENT PROJECT
\$	\$28,568	\$	\$ 28,568	X

ANNUAL = 12 MONTHS ONLY

SUBMITTING DEPARTMENT NAME AND COMPLETE ADDRESS Department of Medicine, Suite 2B-182 14415 Olive View Medical Center Sylmar, CA 91342		TELEPHONE NUMBER 818-364-3205
PROGRAM MANAGER'S NAME Nikhil Barot		TELEPHONE NUMBER 818-364-3205 EMAIL nbarot@dhs.lacounty.gov
PRODUCTIVITY MANAGER'S NAME AND SIGNATURE (PLEASE CALL (213) 897-0322 IF YOU DO NOT KNOW YOUR PRODUCTIVITY MANAGER'S NAME) Gerardo Pinedo	DATE 7.14.14	TELEPHONE NUMBER (213) 240-8104 EMAIL gpinedo@dhs.lacounty.gov
DEPARTMENT HEAD'S NAME AND SIGNATURE Mitchell H. Katz, M.D.	DATE 7/14/14	TELEPHONE NUMBER (213) 240-8101

Quality and Productivity Commission
28th Annual Productivity and Quality Awards Program
“Los Angeles County: Ahead of the Curve”

2014 APPLICATION

Title of Project (Limited to 50 characters, including spaces, using Arial 12 point font):

NAME OF PROJECT: Percutaneous Dilatational Tracheostomy Program

1st FACT SHEET – LIMITED TO 3 PAGES ONLY: Describe the **Challenge, Solution, and Benefits** of the project.

In October 2011, the Division of Pulmonary & Critical Care Medicine at Olive View Medical Center launched a Percutaneous Dilatational Tracheostomy (PDT) program. Historically, inpatients hospitalized in the ICU who required long-term ventilator support underwent Standard Tracheostomies (ST). STs are performed by the ENT service in the Operating Room. In contrast PDTs are performed safely and efficiently at the patient’s bedside in the ICU by the Medical Intensivist team already caring for the patient.

The PDT program has allowed tracheostomies to occur earlier than STs, thus diminishing the wait time for the procedure. As wait time to the procedure diminishes, so too does ICU length of stay (LOS). Performing PDT earlier in the patient’s ICU course also facilitates earlier discharge from the hospital, thus diminishing hospital LOS. These findings of decreased ICU and hospital LOS are supported by published data.

In addition, there is a significant reduction in OR and hospital resources by not utilizing ST. First, as the procedure is performed by the primary team for the patient i.e., the Medical Intensivist team, the ENT service does not need to be consulted. Second, the use of OR time and space are obviated. Third, Anesthesia services are not utilized. The combined avoidance of these additional services and OR facilities results in a significant cost benefit in the published literature.

In reviewing 2 literature samples, reference 1 demonstrates an overall best estimate cost avoidance of \$304,000 for 86 PDTs performed over the study period. Reference 2 demonstrates an overall cost avoidance of \$1,308,949 for 363 PDTs performed over the study period. The cost savings of PDT over ST in Reference 1 & 2 are \$3535 per patient and \$3606 per patient, respectively. In other words, the published references document an average savings of about \$3571 per patient by performing PDT instead of ST.

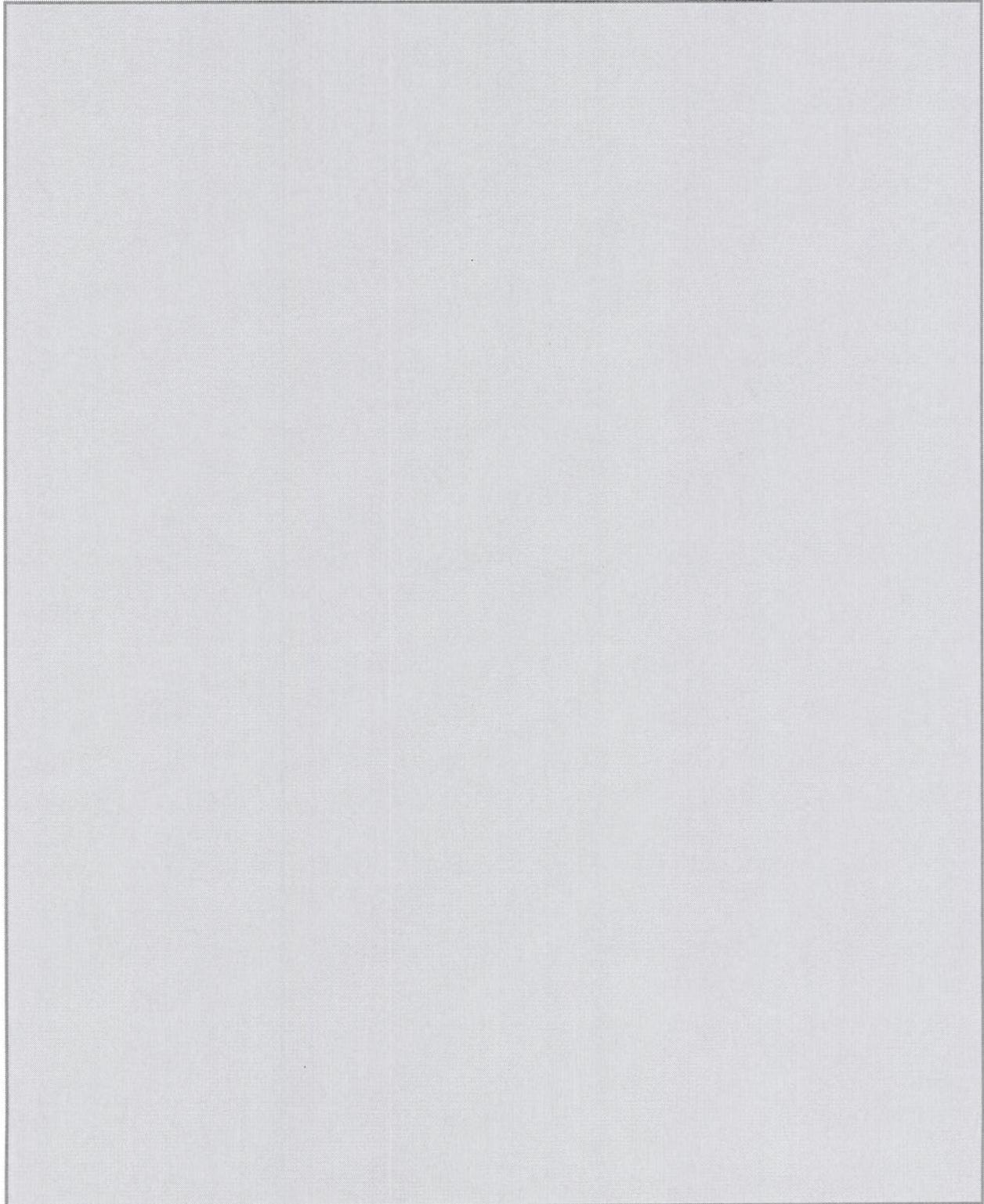
Since October 2011, the Pulmonary & Critical Care Division at Olive View Medical Center has performed 20 PDTs, with an estimated total savings of \$71,420 for the institution. As we perform about 8 PDTs per year, the annual estimated cost savings is \$28,568.

Quality and Productivity Commission
28th Annual Productivity and Quality Awards Program
"Los Angeles County: Ahead of the Curve"

2014 APPLICATION

Title of Project (Limited to 50 characters, including spaces, using Arial 12 point font):

NAME OF PROJECT: Percutaneous Dilatational Tracheostomy Program



Quality and Productivity Commission
28th Annual Productivity and Quality Awards Program
"Los Angeles County: Ahead of the Curve"

2014 APPLICATION

Title of Project (Limited to 50 characters, including spaces, using Arial 12 point font):

NAME OF PROJECT: Percutaneous Dilatational Tracheostomy Program

LINKAGE TO THE COUNTY STRATEGIC PLAN (DETAIL IS REQUIRED FOR COUNTY DEPARTMENTS):

Los Angeles County Strategic Plan

- Aligned with goal 1:Operational Effectiveness:
Maximize the effectiveness of processes, structure, and operations to support timely delivery of customer-oriented and efficient public services.

DHS Strategic Plan

- Assure sufficient capacity of hospital-based services to meet the needs of the residents of Los Angeles County.

Olive View-UCLA Medical Center

- Provide quality services and improve productivity.

Quality and Productivity Commission
28th Annual Productivity and Quality Awards Program
“Los Angeles County: Ahead of the Curve”

2014 APPLICATION

Title of Project (Limited to 50 characters, including spaces, using Arial 12 point font):

NAME OF PROJECT: Percutaneous Dilatational Tracheostomy Program

COST AVOIDANCE, COST SAVINGS, AND REVENUE GENERATED (ESTIMATED BENEFIT): If you are claiming cost benefits, include a calculation on this page. You must include an explanation of the County cost savings, cost avoidance or new revenue that matches the numbers in the box. Remember to keep your supporting documentation.

Cost Avoidance: Costs that are eliminated or not incurred as a result of program outcomes.

Cost Savings: A reduction or lessening of expenditures as a result of program outcomes.

Revenue: Increases in existing revenue streams or new revenue sources to the County as a result of program outcomes.

(1) ACTUAL/ESTIMATED ANNUAL COST AVOIDANCE	(2) ACTUAL/ESTIMATED ANNUAL COST SAVINGS	(3) ACTUAL/ESTIMATED ANNUAL REVENUE	(1) + (2) + (3) TOTAL ANNUAL ACTUAL/ESTIMATED BENEFIT	SERVICE ENHANCEMENT PROJECT
\$	\$28,568	\$	\$28,568	X

ANNUAL= 12 MONTHS ONLY

Reference 1 = $\$304,000/86 = \$3,535$

Reference 2 = $\$1,308,949/363 = \$3,606$

Estimated cost savings of PDT over ST per patient: \$3571

Number of PDTs performed yearly: 8

Total Annual Estimated Benefit: $\$3571 \times 8 = \$28,568$