



Integrating Oral Health Educators into Hospital Care

A White Paper for Improved Outcomes

August 11, 2025

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Executive Summary

Neglecting oral healthcare in hospital settings has significant systemic, clinical, and financial consequences. Hospital-acquired infections such as ventilator-associated pneumonia (VAP) and non-ventilator hospital-acquired pneumonia (NV-HAP) are strongly linked to poor oral hygiene.^{1,2} Inadequate oral care allows harmful bacteria to proliferate in the mouth and aspirate into the lungs, leading to pneumonia, sepsis, and worsened outcomes for patients with chronic diseases.^{3,4} These infections prolong hospital stays, increase antibiotic use, raise costs, and contribute to patient mortality.^{1,3-5} Despite these risks, oral hygiene is often a low priority in hospitals, especially once patients leave intensive care.²

Key barriers to proper hospital oral care include lack of knowledge, lack of time, low prioritization, inadequate protocols, and absence of dental professionals in medical settings.⁶ Nurses lack the education and confidence needed to perform thorough oral assessments,² as well as the skill to provide a level of oral care that reduces mortality. In contrast, oral care delivered by dental personnel has been shown to reduce mortality.⁷ Even with decades of research proving oral care is not properly provided in hospital settings, no standardized role exists for an oral health expert in a hospital setting.

This white paper proposes a paradigm shift in workforce development: integrating registered dental hygienists (RDHs) into hospitals as dedicated oral-systemic health specialists. To formalize this role, we propose hospital-based training and credentialing for RDHs, enabling them to work in hospital settings as **Certified Oral Health Educators™** to improve patient outcomes.

Successful pilot programs demonstrate the efficacy and cost savings of this model. At Phoenix Children's Hospital, an Oral Health Educator has lowered infection rates in hematology/oncology and intensive care units (ICUs) by improving oral care practices.⁸ Texas Children's Hospital reported a 59% reduction in life-threatening bloodstream infections after hiring an integrated dental hygienist to work as an Oral Health Educator, resulting in an estimated \$230,000 in six-month cost savings.³

The pioneers of this role have shown that Oral Health Educators can seamlessly integrate into medical teams — providing preventive education, performing oral health assessments and referrals, and even aiding in palliative care to improve patient comfort. Their work has led to better health outcomes, enthusiastic support from physicians and nurses, and institutional changes like new oral care protocols and electronic health record (EHR) integration.⁸

For hospital administrators, public health agencies, and policymakers, the message is clear: Oral health is not optional or ancillary, but fundamental to patient safety and quality care. Integrating **Certified Oral Health Educators™** into hospitals can reduce preventable infections, improve chronic disease management, enhance patient satisfaction, and save healthcare dollars. This white paper provides an in-depth analysis of the issue, supported by peer-reviewed research and case studies, and offers actionable recommendations to expand the workforce and improve outcomes.

Problem 1: The Connection Between Oral and Systemic Health Has Been Overlooked

For much of the history of modern medicine, the mouth has been treated in isolation from the rest of the body. Hospitals historically address acute medical needs, while oral care is siloed in outpatient dental clinics. This separation ignores decades of evidence that oral health is deeply interconnected with overall systemic health.^{9–13} In 2007, Deamonte Driver, a 12-year-old boy from Maryland, died of a tooth infection that spread to his brain,¹⁴ highlighting oral infections as systemic infections that contribute to mortality regardless of age. The oral cavity harbors a complex microbiome, and inadequate oral hygiene can become a source of infection and inflammation affecting distant organs. Oral diseases such as periodontal disease and dental caries have been linked to a host of chronic conditions — including diabetes, cardiovascular disease, stroke, dementia, and even adverse pregnancy outcomes.¹⁵ An often-cited statistic is that over 90% of common systemic diseases have oral manifestations,⁴ meaning dental providers can often be the first to detect underlying health issues.

The bidirectional relationship between oral and systemic health means that poor oral health can both signal and exacerbate systemic illness. Periodontal infection and the resultant chronic inflammation can worsen glycemic control in diabetes and contribute to atherosclerosis in heart disease.¹⁵ Conversely, systemic diseases or treatments (such as chemotherapy) can compromise oral health by reducing saliva, weakening immunity, or causing mucosal breakdown. The mouth is also the gateway to the respiratory and digestive tracts; bacteria from dental plaque can be aspirated into the lungs or swallowed into the gut.³ Thus, neglecting oral hygiene — especially in vulnerable hospitalized patients — can lead to severe infections in vulnerable patients, such as pneumonia or bloodstream infections, which may progress to sepsis.

Despite this well-established oral-systemic connection, oral health plays “second fiddle” in medical settings. Routine oral care is frequently overlooked in hospitals, and most healthcare providers receive minimal (if any) training in oral health beyond recognizing obvious emergencies.² As a result, opportunities to prevent complications through basic oral hygiene are missed.

The introduction of this paper highlighted how poor dental status is sometimes regarded as a low priority in seriously ill patients — even though untreated oral issues can compound their condition. For example, in palliative care, clinicians may focus solely on life-threatening illness and overlook oral infections or pain that worsens a patient’s quality of life.¹⁶ This omission can lead to unnecessary suffering and medical complications that could have been mitigated by timely dental intervention. In short, the healthcare system’s historical separation of dentistry from medicine is not just an administrative division — it is a patient safety issue.

Problem 2: Barriers to Effective Oral Healthcare in Hospitals

Despite the evident need, hospitals today lack a structured approach to oral healthcare. The responsibility for daily oral hygiene typically falls to nursing staff or nursing assistants as part of basic care. However, multiple barriers prevent effective implementation:

Knowledge and Training Gaps

Nurses receive very little education on oral health during their training. A 2023 nursing study highlighted that nurses often feel unsure about proper oral care techniques and their importance, resulting in inconsistent practice.¹⁷ Oral assessments beyond “moist mucosa” are rarely taught, so conditions like periodontal inflammation or early thrush might go unnoticed by medical staff.

Studies have shown that nurses often lack confidence and detailed knowledge in oral healthcare. For instance, a 2020 study revealed that only a quarter of nursing students could identify the critical components of an oral health assessment, despite a majority believing they understood them.¹⁸ This can lead to infrequent use of standardized assessment tools, with one study finding that 64% of nurses did not use such a tool to measure the condition of a patient’s oral cavity.¹⁹

Perception of Low Priority

Under the pressures of acute care, tasks like toothbrushing can be seen as nonessential or “nice to have.” Staff may prioritize medications, wound care, and vital signs over oral care, especially if leadership hasn’t emphasized it as a standard of care. In some cases, clinicians mistakenly believe that oral care is only about comfort, not recognizing its preventive impact on systemic infections. A 2022 survey of nurses assessing oral hygiene awareness found that 69% stated oral care was not a priority.⁷

However, a growing body of evidence highlights the significant link between oral health and overall systemic health. Poor oral hygiene can lead to serious complications, including hospital-acquired pneumonia (HAP), which can be fatal. In fact, improved oral hygiene could prevent approximately 1 in 10 deaths from pneumonia in elderly nursing home residents. The bacteria from the mouth can also enter the bloodstream and contribute to other serious conditions like heart disease and sepsis.

Time and Staffing Constraints

Nurses are often responsible for many patients, and performing thorough oral care (ideally brushing for two minutes, flossing, suctioning, etc.) can be time-consuming. In busy units, oral hygiene may be omitted due to lack of time or delegated to aides who may be overstretched and are most certainly

undereducated. Without dedicated personnel or sufficient time allotment, oral care falls through the cracks.

In intensive care units, VAP rates have been proven to decrease when nurses provide proper oral care; however, studies show that the rates of compliance decrease with length of stay and average only 69%.²⁰ High nurse-to-patient ratios and demanding workloads contribute to oral care being the third-most missed nursing task.²¹

Fig. 1.

Distribution of nurses' VAP bundle compliance across admission days



Vertical line = nurse's compliance in percentage, horizontal link = days of admission

Reproduced from Al-Harhi F, Al-Noumani H, Matua GA, Al-Abri H, Joseph A. Nurses' compliance to ventilator-associated pneumonia prevention bundle and its effect on patient outcomes in intensive care units. *Nurs Crit Care*. 2025 May;30(3):e70043. doi: 10.1111/nicc.70043. PMID: 40276934; PMCID: PMC12022936.

Inadequate Supplies or Protocols

Hospitals do not stock effective oral care supplies. Often, only foam swabs are available, and studies have shown that foam swabs performed substantially worse than toothbrushes in removing plaque.²² While foam swabs can be useful for moistening the mouth and for patients who cannot tolerate a toothbrush, they do not replace the need for regular brushing. Hospital staff are not educated on oral hygiene products based on disease progression, as a hygienist would be. Consequently, no one is confident in ordering or using the proper products.

Lack of Interdisciplinary Integration

Dental professionals are seldom part of the inpatient team. Hospitals without on-site dental services must rely on outside consultations for acute dental issues, which can be logistically difficult. As a result, nonurgent oral health needs (like preventive cleanings or patient education) are not addressed during a hospital stay. The silo between medicine and dentistry leaves a gap where no provider is "owning" oral health in the hospital.

The Consequences of Inadequate Oral Care in Hospitals

1. Systemic and Clinical Consequences

HAP

Failing to include proper oral healthcare in hospital protocols has tangible clinical repercussions for patients. HAP is one of the most prevalent and deadly complications in inpatient settings, and the mouth is understood to be a primary reservoir for the pathogens that cause it.

VAP

When patients are intubated on mechanical ventilation, rigorous oral care (including antiseptic rinses) is part of standard VAP prevention bundles, which has led to progress in reducing VAP.² However, evidence-based research indicates that this approach is insufficient for comprehensive oral microbial reduction. Moreover, it may contribute to adverse health outcomes and cause further damage. Recent studies reveal a concerning link between the use of these antiseptic mouth rinses and increased risks of hypertension and mortality in hospitalized patients.^{23–26} This latest finding is partly attributed to the disruption of the nitrate–nitrite–nitric oxide pathway, which is crucial for blood pressure regulation.^{26,27} Relying solely on antiseptic rinses or basic swabbing overlooks the complex oral microbiome and its systemic implications.

NV-HAP

Patients who are *not* on ventilators receive far less attention to oral hygiene, and the result has been an epidemic of NV-HAP.² NV-HAP has mortality rates comparable to VAP and accounts for an estimated 7% of all hospital deaths,² yet most hospitals do not systematically track or prevent it.⁵

Research indicates that neglected oral care is a critical factor in many NV-HAP cases. One study found that 60.5% of patients who developed NV-HAP had *no* documented oral care in their charts.² Without an adequate oral care routine to remove biofilm, dental plaque becomes laden with respiratory pathogens that can be aspirated into the lungs, especially in patients who are weak, sedated, or have swallowing difficulties.² The resulting pneumonias lead to extended hospital stays (often by one to two extra weeks), higher likelihood of ICU transfer, and increased 30-day readmission rates among survivors.⁵ In essence, when oral hygiene is ignored, pneumonia can thrive — costing lives and resources that could have been saved by preventive care.

Sepsis and Infection

Sepsis is another possible life-threatening consequence of oral infections. Hospitalized patients — particularly those who are immunocompromised or have indwelling lines — are at risk for opportunistic infections. For example, cancer patients undergoing chemotherapy often develop oral mucositis, which can become a portal for bacteria into the bloodstream. In pediatric oncology units, these infections are tracked as mucosal barrier injury central-line–associated bloodstream infections (MBI-CLABSIs). They are directly tied to inadequate oral care and

carry a roughly 7% 30-day mortality rate.³ In other words, roughly 1 in 14 children who develop a bloodstream infection due to oral mucosal injury will die within a month. This grim statistic underscores how oral health neglect can tip vulnerable patients into septicemia. Indeed, clinicians have observed that keeping oral bacteria in check is crucial to preventing central-line infections in patients with feeding tubes or IV lines.⁸ Oral pathogens like *Streptococcus* can translocate via mucosal ulcers or gum inflammation into the bloodstream, especially when normal immune defenses are down. What may appear to be a localized dental issue, such as an abscessed tooth or severe gingivitis, can trigger a serious systemic infection that may require intensive care intervention.

Chronic Disease and Recovery

Beyond acute infections, poor oral care in the hospital can exacerbate chronic diseases and impede recovery. Patients with poorly controlled diabetes (A1c of 9 or above) may experience further dysregulation of blood glucose if they develop periodontal infections in the hospital, since inflammation and infection drive up blood sugar.¹⁵ Those with cardiovascular conditions could suffer inflammatory stress or even endocarditis from oral bacteria that enter the circulation.²⁸ Inadequate oral hygiene also contributes to discomfort in hospitalized elders (as painful oropharyngeal thrush and dental pain often go unrecognized), leading to reduced oral intake and malnutrition. Taken together, these systemic and clinical impacts paint a clear picture: Omitting oral healthcare in hospitals directly compromises patient safety and outcomes.

2. Financial and Quality Consequences for Healthcare Systems

The fallout from poor oral health in hospitals is measured not only in clinical terms but also in dollars and cents that matter to healthcare administrators and payers. Hospital-acquired infections driven by oral neglect carry a hefty price tag. Pneumonia, for instance, is among the costliest inpatient complications. Estimates suggest that each case of HAP can cost a hospital \$20,000–\$40,000 in additional expenses, due to prolonged admission, intensive care utilization, diagnostic tests, and treatments.^{29,30} If a patient aspirates oral bacteria and develops NV-HAP, the hospital must often absorb the costs of extra care, since insurers and Medicare may not fully reimburse for preventable hospital-acquired conditions. In aggregate, NV-HAP's burden is enormous. One study in Pennsylvania found that NV-HAP occurred more often than VAP, was associated with similar risk factors and complications, and was associated with a greater overall economic burden (\$156 million compared to \$86 million).³⁰ With a mortality rate of 13.9%-19%, reducing these infections through better oral care directly translates into cost savings and improved hospital performance metrics.

Bloodstream infections related to poor oral health are similarly expensive. A central-line-associated bloodstream infection (CLABSI) can incur upward of \$45,000 in treatment costs per incident, not to mention penalties in value-based purchasing programs for hospitals. In the case of MBI-CLABSIs in cancer patients, one children's hospital calculated that introducing robust oral care protocols and an oral health specialist saved approximately \$230,000 over just six months by preventing these infections.³ This kind of return on

investment makes a compelling business case: A **Certified Oral Health Educator™** in the hospital can pay for themselves many times over in the infections and complications they avert.

3. Accreditation and Legal Risks

Neglecting oral health also has indirect financial ramifications. Poor patient outcomes — such as pneumonias or sepsis — contribute to higher mortality and readmission rates, which are key quality indicators. Hospitals with high rates of such complications may suffer reputational damage or reduced reimbursements. There is also legal risk: If a preventable, oral-health-related infection leads to serious harm, hospitals could face liability or accreditation issues.

There were 2.1 million emergency room visits for dental emergencies in the United States in 2017.³¹ If a **Certified Oral Health Educator™** were on staff, proper triage, and potentially some level of treatment, could be performed, as well as referrals and follow-ups for dental care. From a system perspective, failing to integrate oral health can fragment care and increase patient safety and legal risks.

In contrast, making oral hygiene a standard part of hospital care can improve metrics that administrators and policymakers care about: *shorter lengths of stay, lower infection rates, higher patient satisfaction*, and possibly even improved chronic disease management post-discharge. All these translate to cost-effectiveness and value. As discussed later, pioneering programs have documented fewer infections and better outcomes when oral care is enhanced — outcomes that align with hospitals' goals under pay-for-performance schemes. In summary, the financial consequences of ignoring oral health are substantial, whereas the financial benefits of proactive oral care are increasingly proven. Hospital leaders have a fiduciary and ethical incentive to tackle this issue head-on.

Solution: Develop an **Oral Health Educator Certification™** to Prepare RDHs to Work in Hospital Settings

Often mischaracterized as being on-the-job trained solely to provide dental cleanings, RDHs are, in fact, licensed healthcare providers with an educational background comparable to registered nurses (RNs). They are chronic disease prevention specialists, trained to manage the complex oral microbiome and its effects on systemic health. Their exclusion from collaborative care models is a missed opportunity for more effective, patient-centered healthcare. The missing component is a formal credentialing process to prepare RDHs to work in inpatient settings.

Education, License, and Continuing Education Requirements

According to the American Dental Hygiene Association (ADHA), dental hygienists complete nearly 3,000 hours of didactic and clinical training before licensure.³² Dental hygienists' education and direct patient care experience already equip them to play a pivotal role in systemic health,⁴ and their continuing education requirements (equal to an RN's) ensure they stay informed of emerging evidence-based protocols. As oral health specialists on the medical team, dental hygienists can

independently perform oral assessments, educate staff and patients on proper oral care, and collaborate on infection control efforts.

Alongside all health profession students, including premed and nursing students, dental hygiene students take the same foundational science classes to ensure a strong understanding of the human body and how it functions. In addition to taking and interpreting radiographs, providing local anesthesia, and performing nonsurgical periodontal therapy, dental hygiene students complete a structured and intensive curriculum that includes:

- Anatomy and physiology
- Histology and embryology
- Pathology and pharmacology
- Microbiology and immunology
- Medical emergencies and infection control
- Patient assessment and care planning
- Ethics and communication
- Public and community health
- HIPAA and protected health information (PHI)
- Cardiopulmonary resuscitation (CPR)
- Principles for research

Dental hygiene students learn to perform head and neck examinations, identify oral manifestations of disease, and handle medical emergencies. They are also well-versed in infection control, patient counseling, and working with diverse populations, including those with special healthcare needs. In practice, RDHs regularly coordinate with dentists and other providers to manage patient care. Given this broad competency, RDHs are already *preventive health specialists* focused on the complex oral cavity but trained to recognize systemic issues. They are taught to interpret health histories, monitor vital signs, and apply evidence-based interventions — all skills that overlap with nursing functions.

Crucially, hygienists are experts in *behavior change counseling* and education, as a core part of oral-systemic disease prevention is motivating patients toward better oral hygiene habits. This makes them ideal champions of patient and staff education on oral care in the hospital environment. As hospital-based hygienist Katharine Martinez described, “*Hygienists ... are well-rounded healthcare providers with the capacity to do more than just ‘scale teeth.’ It only makes sense to start utilizing hygienists in hospital settings to educate providers on oral bacteria and ways to reduce infections.*”⁴ By leveraging their expertise, hospitals can ensure that oral hygiene is not an afterthought but a standardized, high-quality part of patient care.

Scope of Practice

A **Certified Oral Health Educator™** in a hospital setting would collaborate with the nursing and medical teams, similar to how a wound care nurse or diabetes educator functions. Key responsibilities could include:

1. Performing oral health assessments and identifying high-risk patients on admission. This triage involves a detailed exam of teeth, gums, mucosa, and throat to identify issues like decay, infection, mucositis, or fungal overgrowth. The hygienist can document an oral health status in the EHR (as was done at Phoenix Children’s Hospital with a dedicated oral health tab)⁸ and flag patients in need of dental consults or urgent care.
2. Implementing preventive oral care protocols to ensure that every patient unable to self-care receives proper oral hygiene, with the latest tools for their specific mouth, based on the most *current, evidence-based standards*. They can work with nursing aides on daily rounds to carry this out, much like a respiratory therapist assists with pulmonary hygiene.
3. Providing targeted interventions for those at highest risk. For ventilated patients, this may involve suctioning oral secretions and carrying out ICU protocols. For oncology patients, the focus is on prevention of mucositis and infection. For end-of-life patients, it means gentle cleaning and saliva substitutes to ensure comfort.
4. Serving as an educator and consultant, training teams in proper oral care techniques and their rationale, and improving overall compliance.
5. Evaluating oral complaints and recommending management rather than automatically resorting to a specialist consultation with an otolaryngologist or dentist.⁸ This “curbside” consulting saves time and ensures minor oral issues do not escalate.
6. Educating patients and families on maintaining oral hygiene during hospitalization and after discharge (especially important for conditions like diabetes or preventing aspiration pneumonia at home).
7. Facilitating referrals and dental treatment when an assessment finds an urgent problem beyond the scope of bedside care — for example, a dental abscess or untreated periodontal disease — for coordination of a prompt referral to a dental office. In some models, the **Certified Oral Health Educator™** might even perform certain interim treatments (e.g., applying temporary fillings or debriding an area) to hold the patient over until definitive dental care is obtained. They would thus act as a bridge between the hospital and dental providers in the community, collaborating with dentists and speaking their language.
8. Contributing to policy and procurement. As seen in pilot programs, such as at Phoenix Children’s Hospital, an Oral Health Educator can lead the development of hospital-wide oral care guidelines and ensure appropriate supplies are available.⁸ They may sit on infection control committees, contribute to quality improvement projects, and advocate for oral health considerations in all relevant aspects of care (nutrition, oncology, intensive care, etc.). For example, an Oral Health Educator in one program updated the formulary of oral care products for NICU, ventilated, and oncology patients and revised clinical protocols accordingly.⁸

By fulfilling these functions, the **Certified Oral Health Educator™** becomes an indispensable member of the care team focused on prevention and holistic health. Physicians and nurses who have worked with Oral Health Educators report a great appreciation for the added expertise: Many admit their own training in oral health was limited, so having a colleague specialize in it elevates the standard of care.⁸ This collaborative practice also allows nurses to focus on other tasks, knowing that a skilled professional is ensuring oral care is carried out properly.

Outline of Oral Health Educator Certification™

The formalization of an **Oral Health Educator Certification™** requires three key components:

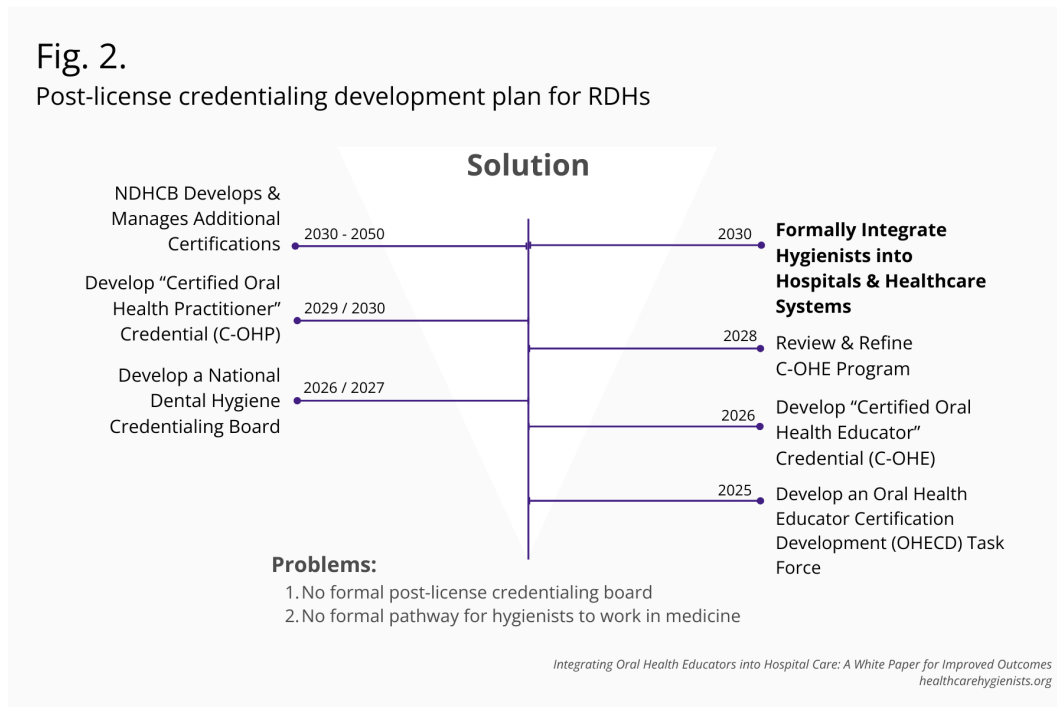
1. **Educational curriculum:** Certificate programs that will offer dental continuing education credit and prepare RDHs to pass the board examination
2. **Direct experience:** An internship or clinical rotation in a hospital setting
3. **Credentialing:** Proof of minimal competency to perform the job

An **Oral Health Educator Certification Development (OHECD) Task Force** is being led by the National Network of Healthcare Hygienists (NNHH) to identify what a minimally competent Oral Health Educator should know to practice safely in a hospital setting. Once the task force agrees on what a minimally competent **Certified Oral Health Educator™** should know, the outline will be made public.

Additionally, the OHECD Task Force will establish if a national dental hygiene credentialing board (focused on post-license credentialing) can be developed in a timely manner. Cost, barriers, benefits, and potential funding partnerships will be explored. If a credentialing board cannot be established in an efficient manner, the task force will approach a nurse credentialing board to explore the oversight of the **Oral Health Educator Certification™**. It is imperative that all potential conflicts of interest be considered during the developmental period to preserve the integrity of the credential and to comply with ISO/IEC 17024 standards for certification of persons.

Fig. 2.

Post-license credentialing development plan for RDHs



Requisites

The requisites to apply for the credentials introduced in this white paper need to be developed.

They may include:

1. Certified Oral Health Educator™ (C-OHE™)

Proposed Requisites:

- a. An associate or bachelor's degree from a Commission on Dental Accreditation (CODA)-accredited dental hygiene program
- b. A valid state dental hygiene license (RDH)
- c. Two years of clinical experience as an RDH
 - i. Minimum 500 hours of practice
- d. An **Oral Health Educator Certification™** (to be created)
 - i. Management options:
 1. A national dental hygiene credentialing board (to be created)
 2. A nurse credentialing board
 - ii. Accreditation:
 1. Built on ISO/IEC 17024 standards (certification of persons)
 - iii. Education:
 1. 50 hours of comprehensive training
 - a. Topics and standards to be determined
 - b. Continuing education credit provided
 - c. Built on the ASTM E2659 standard for certificate programs
 2. A six-week practicum for hands-on learning in a hospital setting
 - iv. Assessment:
 1. Uses a criterion-referenced, proctored, written summative assessment
 - v. Renewal:
 1. Every three years or as determined by the credentialing body

2. Certified Oral Health Practitioner™ (C-OHP™)

To be developed two years after the **Oral Health Educator Certification™** is published.

Proposed Requisites:

- a. A valid state dental hygiene license (RDH)
- b. Two years of experience as a **Certified Oral Health Educator™**
 - i. A minimum of 2,000 hours
- c. A master's degree in dental hygiene, dental therapy, public health, or healthcare administration
 - i. Similar degrees (or experience) may be accepted (to be determined)
- d. An **Oral Health Practitioner Certification™** (to be created)
 - i. Management:
 1. A national dental hygiene credentialing board (to be created)

- ii. Accreditation:
 - 1. Built on ISO/IEC 17024 standards (certification of persons)
- iii. Education/Training:
 - 1. To be determined by the credentialing body two years after the **Oral Health Educator Certification™** is published
- iv. Assessment:
 - 1. Uses a criterion-referenced, proctored, written summative assessment
- v. Renewal:
 - 1. Must be renewed every three years or as determined by the credentialing body

Successful Integration of Oral Health Educators into Hospital Settings

Direct Access

A previous barrier to Oral Health Educators in hospital settings has been a lack of direct access. The ADHA has taken an official stance *for* direct access to oral healthcare:

“It is the position of ADHA that oral health care—a fundamental component of total health care—is the right of all people. Lack of access to oral health care is a critical issue in the United States due to disparities in the health care delivery system. Dental hygienists must play a vital role in the solution to eliminate these disparities and assure quality oral health care for all.”³³

The ADHA defines direct access to oral health as “the ability of a dental hygienist to initiate treatment based on their assessment of a patient’s needs without the specific authorization of a dentist, [to] treat the patient without the presence of a dentist, and [to] maintain a provider-patient relationship.”³³

At the time of this publication, 43 states allow direct access for RDHs,³³ and states that do not allow direct access have hygienists actively advocating for it, especially for vulnerable populations. Teledentistry has eased access and regulatory issues and is often utilized in rural and nontraditional settings. Each state has different guidelines, but most that allow direct access have three to four requirements:

1. A collaborative agreement with a dentist
2. An application process
3. A minimal number of years of licensure and/or hours of clinical practice
4. Specific education or liability insurance (less common)

The most current access map and direct access chart with specifics broken down can be viewed anytime at <https://www.adha.org/advocacy/scope-of-practice/direct-access/>.

The ADHA also supports modernizing curricula, embracing new healthcare models, specialization, and

autonomy, which are all fundamental to the success of formalizing a hospital-based Oral Health Educator credential.³⁴

Some states, like Arizona (under HB 2058), allow dental hygienists working in hospital settings to practice under the supervision of a licensed physician. The supervising physician must be available for consultation but does not need to be physically present when an RDH or Oral Health Educator administers care. The autonomy granted to RDHs in Arizona has allowed many successful hospital and ICU pilot programs to hire permanent teams of Oral Health Educators.³⁵

Successful Case Studies

Real-world implementations of hospital-based Oral Health Educators are still emerging, but early adopters offer compelling proof of concept.

Phoenix Children’s Hospital (Katharine Martinez, MPH, RDH)

In 2019, Phoenix Children’s — in collaboration with Delta Dental of Arizona — created an Oral Health Educator position, filled by Katharine Martinez, an RDH with a master’s degree in public health. The goal was to reduce hospital-acquired infections by improving oral care for high-risk pediatric patients. Martinez works across the hematology/oncology unit, the pediatric ICU, and the cardiovascular ICU, focusing on patients with central lines, those on ventilators, and others highly susceptible to infections.^{4,8}

In the role, Martinez has implemented a multifaceted oral health program⁸:

- Martinez educates providers, nurses, and families about the critical importance of oral hygiene during cancer treatment and critical illness. This includes formal training and daily informal teaching on rounds. Topics range from managing chemotherapy side effects like xerostomia (dry mouth) and oral mucositis to demonstrating proper brushing techniques for caregivers.
- Martinez performs daily rounds, examining patients’ mouths and advising the medical team on oral findings. Nurses now actively consult her to address oral side effects of treatment and to obtain recommendations for preventing complications.
- Martinez successfully advocated for an “Oral Health” section in the hospital’s EHR, ensuring that oral assessments and care plans are documented just like vital signs or medications. As a result, a detailed, hospital-wide oral hygiene protocol was integrated directly into the flowsheet.
- Martinez was tasked with updating hospital protocols for mucosal barrier injury in partnership with physicians and even Mayo Clinic collaborators. This resulted in prevention bundles for oral mucositis and clearer, evidence-based oral care guidelines for adult and pediatric bone marrow transplant (BMT) patients.
- On a patient care level, Martinez provides preventive services: conducting pretransplant oral assessments for oncology patients and ensuring bedside oral care supplies are

appropriate (for example, swapping ineffective foam swabs for soft-bristled toothbrushes and suction equipment as needed).

Martinez states there is a “*sense of gratitude among nurses and doctors*” now that an oral health expert addresses these issues. Providers no longer feel at a loss when encountering oral complications; instead, they have a go-to colleague to manage those problems swiftly. A dedicated oral health consult tab within the EHR enhances care coordination and streamlines referrals. Martinez notes that through proper oral care education, assessment, and infection prevention measures, there has been a noticeable reduction in hospital-acquired infections (HAIs) in her hospital. Perhaps equally important is the cultural change: Medical residents trained with her input now leave with an appreciation for oral health that they carry into their future practice.⁸

Martinez is now sharing her knowledge and expertise to help other hospitals integrate Oral Health Educators into their facilities. She designed the curriculum for, and instructed, the pediatric section of the Oncology Certificate Program for RDHs™ through the NNHH and speaks nationwide.

Texas Children’s Hospital (Jenell Robins, BSDH, RDH)

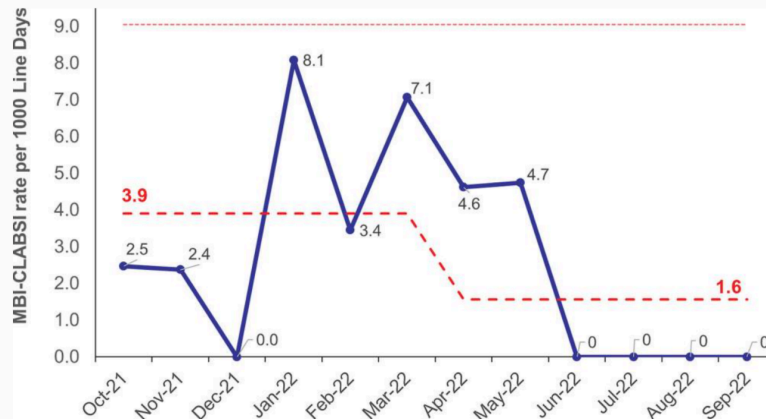
Another instructive case comes from Texas Children’s Hospital, where an innovative quality improvement project integrated a dental hygienist into the pediatric BMT unit. Published in 2024 in a peer-reviewed journal, the project reports dramatic improvements after Jenell Robins, BSDH, RDH, was hired as a dedicated Oral Health Educator for the unit.³ Before this intervention, the unit struggled with frequent MBI-CLABSIs among immunosuppressed patients — a direct consequence of severe oral mucositis and bacterial overgrowth in the mouth during chemotherapy.

After Robins joined the team and implemented strengthened oral care protocols³:

- MBI-CLABSI incidence plummeted by 59%, eventually reaching zero cases for several consecutive months. This indicates that nearly all such infections were preventable with rigorous oral hygiene and oversight.
- Oral care compliance (bundle adherence) rose above 75% consistently, whereas previously oral care was often missed or done poorly. Robins ensured nurses and families followed a strict oral care schedule and proper technique.
- Financial savings of approximately \$230,000 over six months were achieved due to avoided infections and their associated costs. This concrete figure is a powerful argument for the cost-effectiveness of the role.
- In addition to infection metrics, Robins’s presence improved the patient and caregiver experience by relieving the distress of oral side effects. Parents of BMT patients, for instance, felt more supported and informed on how to care for their child’s mouth during treatment.

Fig. 3.

Overall MBI-CLABSI rate after Oral Health Educator implementation at Texas Children's Hospital



Reproduced from Bledsaw K, Patel M, Jones E, et al. Integration of an oral health educator enhances prevention of mucosal barrier injury CLABSI for pediatric BMT patients. *Jt Comm J Qual Patient Saf.* 2024;50(1):48-53. Figure 1, Overall MBI-CLABSI rate after oral health educator implementation at Texas Children's Hospital.

In essence, Robins became the linchpin of a preventive oral care program that saved lives and reduced healthcare costs.³ Texas Children's has since sustained this role, and it serves as a model for other oncology and critical care units facing similar challenges.

Dignity Health in Mesa, Arizona (Sheba Jones, MSDH, RDH, AP)

Dignity Health in Mesa, Arizona, is a large hospital network that employs seven RDHs, including Sheba Jones, a hospital-affiliated practice dental hygienist and Oral Health Educator. Dignity Health, united with Catholic Health Initiatives (as CommonSpirit Health), is a nonprofit provider offering services in 21 states. Their Oral Health department has been in existence for 12 years and is fully grant-funded.³⁶

Jones provides direct patient care and mentors dental hygiene students in clinical rotations to prepare them to seek out hospital positions. RDHs in Arizona can work under the general supervision of a dentist or physician.³⁵ A few of Jones's roles are:

- Conducting outreach in community dental health clinics for low-income residents
- Providing community education and screenings in five clinics
- Screening and supporting expectant mothers and children under five to secure a dental home
- Providing oral health services to advanced airway patients (endotracheal tube or tracheostomy/ventilators) to reduce oral biofilm that contributes to VAP
- Educating providers on the link between oral and systemic health³⁶

Banner Health in Mesa, Arizona

Banner Health in Mesa, Arizona, uses RDHs as Oral Health Educators in hospitals and community health centers. They practice patient-centered care, assessing oral health in medical settings. They work with other health professionals to improve patient care by:

- Providing oral health protocols
- Collaborating with case managers and social workers
- Establishing an oral health standard of care
- Providing triage for patients visiting an emergency room
- Connecting hospital and ER patients with dental homes for follow-up³⁶

CARTI Cancer Center (Jennifer Brown, BSDH, RDH, CH-OSE)

CARTI Cancer Center in Little Rock, Arkansas, understands the importance of oral health during cancer treatment, so they embedded a full dental clinic and dedicated oncological dental professionals within it. CARTI provides vital oral healthcare tailored for cancer patients — particularly those receiving chemotherapy or radiation therapy — without requiring a physician or insurance referral. The clinic offers a comprehensive range of services, including digital X-rays, intraoral photography, prophylaxis, nonsurgical periodontal therapy, head and neck cancer screenings, cavity-prevention nutrition counseling, restorative dentistry, extractions, dentures, oral care education, and more — all designed to minimize infection risk, reduce treatment side effects, and avoid delays in cancer care.³⁷

A cornerstone of the clinic’s compassionate service is Jennifer Brown, CARTI’s full-time oncology dental hygienist. Brown holds a Certificate in Oral Systemic Education™ through the NNHH, which is an ANSI/ASTM E2659–accredited certificate program, and is an instructor in the Oncology Certificate for RDHs™, also published by the NNHH. Brown has dedicated her career and education to helping address the oral health needs of cancer patients. She spent eight years in two hospital cancer centers in Colorado and is now navigating dental care for head and neck cancer patients at CARTI Cancer Center. Brown focuses her time on patients’ dental needs before radiation therapy and/or chemotherapy, including clinical hygiene, educating patients on the importance of oral care during treatment, and collaborating with their dental home to ensure they receive recommended post-treatment care.³⁷

Aligning with CARTI’s value of an innovative approach, the dental clinic is addressing the recognized need for oral health support for all cancer patients and has developed a streamlined protocol for patients at risk for medication-related osteonecrosis of the jaw (MRONJ). Brown works closely with the other oncology treatment providers and is a member of their collaborative care team. CARTI Cancer Center is practicing true patient-centered care by integrating oral health.³⁷

Oklahoma City Indian Clinic: Integrated Dental Hygiene Program

The Oklahoma City Indian Clinic (OKCIC) has pioneered an integrated dental hygiene program, embedding RDHs directly into primary care and specialty medical clinics to increase access to care. Dental director Brianne Carter, RDH, CH-OSE, piloted the role in 2022 while completing the Oral Systemic Educator Certificate Program™. Today, Carter’s integrated RDHs (I-RDHs) collaborate closely with medical teams in pediatrics, women’s health, and the metabolic specialty clinics to provide preventive oral health services, educate patients, and facilitate referrals, ensuring a holistic approach to patient care.³⁸

Cooper University Hospital (Cynthia Scott, CDA, RDH, PHDH, CH-OSE)

Cynthia Scott exemplifies the role of an RDH in an integrated healthcare environment. At Cooper University Hospital in Camden, New Jersey, she has been instrumental in developing an integrated dental clinic within the hospital’s HIV, Infectious Disease, and Addiction program, and because of her impact, the system just added another RDH to the team. Holding a practicum-level Certificate in Oral Systemic Education™, Scott focuses on administrative and policy aspects to ensure seamless integration of dental services into medical care. Her efforts aim to provide comprehensive oral health services to patients with complex medical conditions, highlighting the critical role of RDHs in interdisciplinary healthcare teams.³⁹

Recommendations and Policy Implications

Not all hospitals will have the space to integrate a full dental clinic, but oral health protocols can easily be developed by having a **Certified Oral Health Educator™** assess patient needs in both inpatient and outpatient settings. To realize the benefits of proper oral healthcare in hospitals, a concerted effort is needed from hospital leadership, public health organizations, and policymakers. The following recommendations chart a path forward, beyond the development of a new workforce model to proper utilization of the new team member.

1. Make Oral Hygiene a Standard of Care in Hospitals:

Accrediting bodies and healthcare quality organizations should explicitly include oral care in patient safety and quality guidelines. For example, the Joint Commission and the Centers for Medicare & Medicaid Services (CMS) could incorporate oral health metrics (like incidence of NV-HAP or oral assessment documentation rates) into their evaluations. A national “call to action” on NV-HAP already urges healthcare systems to implement prevention measures, including oral care protocols.⁵ Hospitals should respond by establishing mandatory oral care regimens for all dependent patients (e.g., brushing twice daily with suction equipment for those who cannot do it themselves). This might involve simple steps like adding oral care to nursing flow sheets and checklists to ensure it is not overlooked.

2. Empower Certified Oral Health Educators™ to Lead Oral Health Initiatives:

Hospitals that employ **Certified Oral Health Educators™** should integrate them into relevant committees (infection control, patient safety, etc.) and quality improvement initiatives. Their

input can help shape protocols for ventilator care, central line care, and postoperative care where oral health is a factor. As seen, a **Certified Oral Health Educator™** can spearhead updating the formulary of oral care products or design an oral care “bundle” for NV-HAP prevention.⁸ Administrators should give these professionals the authority to develop and enforce oral care standards — for instance, allowing the oral health nurse to conduct weekly audits of oral care compliance on units and to work with unit managers to address gaps. This improves care and signals to all staff that the institution values oral health.

Moreover, **Certified Oral Health Educators™** should be involved in patient education initiatives hospital-wide. They can create pamphlets, signage, and training sessions for patients and families on the importance of oral care (much like infection preventionists create hand hygiene campaigns). Public health agencies could partner with hospitals to disseminate educational materials, especially for populations like seniors or immunocompromised patients who frequently use hospital services.

3. Include Oral Health in Interprofessional Education and Training:

The long-term solution to the oral health/overall health divide is cultivating a workforce that views oral care as part of their responsibility. Academic institutions and teaching hospitals should ensure that medical, nursing, and allied health trainees learn about oral-systemic connections. Programs like Teaching Oral-Systemic Health (TOSH) and Smiles for Life have developed curricula for non-dental providers to learn oral health basics.⁵ These should be widely implemented until a team of Oral Health Educators can take ownership of the duties. Additionally, hospitals can host rotations or shadowing opportunities where medical trainees spend time with **Certified Oral Health Educators™** to foster collaboration. Policymakers can incentivize this by tying grant funding or accreditation elements to interprofessional education that includes oral health. By normalizing oral health as everyone’s responsibility, the culture will shift to sustain improvements.

4. Support Research and Data Collection:

As we integrate **Certified Oral Health Educator™** and oral care programs into hospitals, it’s important to continue building the evidence base. Hospital systems should track metrics like rates of NV-HAP, VAP, CLABSI, length of stay, patient satisfaction, and cost savings before and after implementing enhanced oral care protocols. Publishing these results will bolster the case for further adoption. Public health agencies and foundations might fund demonstration projects to evaluate the impact of oral health interventions on outcomes such as surgical recovery. The emerging data already show impressive reductions in pneumonia and bloodstream infections,^{15,30} but more research can explore additional benefits. Strong data will influence policy — for instance, if consistent evidence shows a significant drop in pneumonia with a certain oral care regimen, regulatory bodies might then mandate that regimen.

5. Address Oral Health in Palliative and Continuity of Care:

Special attention should be given to patients with serious, chronic, or terminal conditions. As

noted, those in palliative or long-term care often suffer from neglect of oral health, which can exacerbate their condition or cause avoidable discomfort.¹⁶ Hospitals and hospice organizations should incorporate oral health evaluations early in the care of patients with life-limiting illness. A **Certified Oral Health Educator™** on the palliative care team can ensure that issues like oral thrush, dry mouth, or painful cavities are managed promptly — improving the patient’s ability to eat, communicate, and maintain dignity. Policymakers could push for Medicare and insurance coverage of bedside oral health consultations for hospitalized or homebound patients to remove financial barriers. Additionally, creating partnerships between hospitals and community dental services (such as mobile dental vans or referral networks for after-discharge care) will help maintain the gains achieved during a hospital stay. Continuity is key: The hospital should not fix an acute oral issue only for the patient to relapse due to lack of follow-up. The **Certified Oral Health Educator™** role can include discharge planning for oral health, similar to how case managers plan for medication and therapy needs.

Actionable Takeaways

For Hospital Administrators: Embracing this model could improve key performance indicators and reduce liability from preventable harms. It can preserve accreditation standing while boosting patient safety and satisfaction, leading to fewer financial losses.

For Public Health Agencies: Formal creation of these roles aligns with goals of infection control, chronic disease management, and health equity (since hospitalized patients often include the most vulnerable populations with poor access to regular dental care).

For Policymakers: These underutilized, licensed healthcare providers represent a forward-thinking, integrative approach that breaks down artificial barriers between professions in service of the patient’s well-being. In a healthcare environment increasingly focused on value and outcomes, ensuring that no aspect of a patient’s health is ignored — especially their oral-systemic health — is simply common sense. Support legislation that allows RDHs to work under physicians, in non-dental settings, and as **Certified Oral Health Educators™**.

Conclusion

The mouth can no longer be viewed as separate from the body in healthcare, as the research is too vast to disprove. By integrating standardized oral care into hospital protocols and empowering **Certified Oral Health Educators™** to lead these initiatives, we can reduce the incidence of pneumonia and sepsis, lower morbidity rates, improve chronic disease management, enhance patient satisfaction, and decrease overall healthcare costs. The evidence is strong, and the pioneering programs have shown it is feasible. It is now up to decision-makers to scale up these solutions. The prescription is clear: Integrate oral health into hospital care for a safer, healthier, and more financially sustainable healthcare system.

The institutions that have already successfully integrated oral healthcare offer a roadmap for the nation. Together, these visionaries have prevented infections, improved patient safety, and impacted

measurable metrics. These outcomes are not coincidences — they are a direct result of addressing a previously unmet need. They demonstrate that when oral health is tended to with the same rigor as other aspects of care, patient outcomes improve across the board.

RDHs are essential members of collaborative care, ensuring comprehensive, patient-centered health solutions. With proper training and credentialing as **Certified Oral Health Educators™**, RDHs will seamlessly integrate into hospital settings for improved outcomes.

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