

Selah Innovations



Mission Statement

To provide a more dignified, comfortable, and hygienic toileting experience for bed-bound patients, while reducing the burden on nurses and caregivers.

The Bedet – healthcare’s first bedpan–bidet hybrid. Built to integrate with existing hospital equipment, it combines suction–assisted waste collection, gentle rinsing, and air drying to enhance patient care. Created by a nurse who understands the daily challenges of bedside toileting, the Bedet aims to protect patient skin, promote infection control, and streamline caregiver workflows.

Problem – Healthcare’s overlooked crisis

For Patients

- **Widespread Pain & Anxiety:** 78% of patients report moderate-to-severe pain or anxiety during use.
- **Behavioral Harm:** Profound humiliation causes patients to avoid eating and drinking, risking malnutrition, dehydration, and further constipation.
- **Severe Complications:** A direct cause of costly pressure injuries (up to \$38k/case) and healthcare-associated infections (up to \$20k/case).

For Caregivers

- **High Injury Rates:** 67% of nurses experience musculoskeletal strain from toileting-related tasks.
- **Top Physical Burden:** Toileting is ranked as the #1 physical burden by 46% of care staff, driving high rates of burnout.

For Facilities

- **Major "Never Event" Costs:** A primary driver of costly, non-reimbursable events including HAIs, pressure injuries, and patient falls.
- **Extreme Labor Inefficiency:** Each toileting episode consumes 18–32 minutes of valuable nursing time and often requires two caregivers.
- **Massive Financial Drain:** The total annual cost to manage the consequences of traditional bedpans can exceed \$10.5 million for a 500-bed hospital.

Solution – The Bedet: a nurse-tailored response to the crisis

For Patients

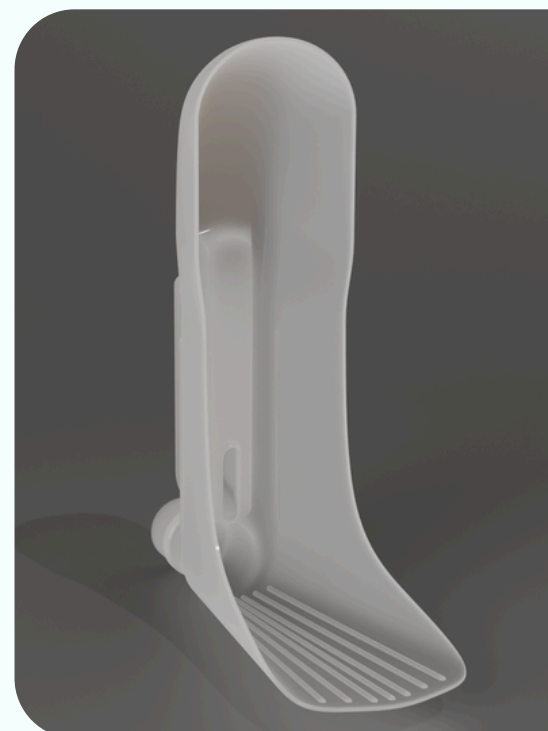
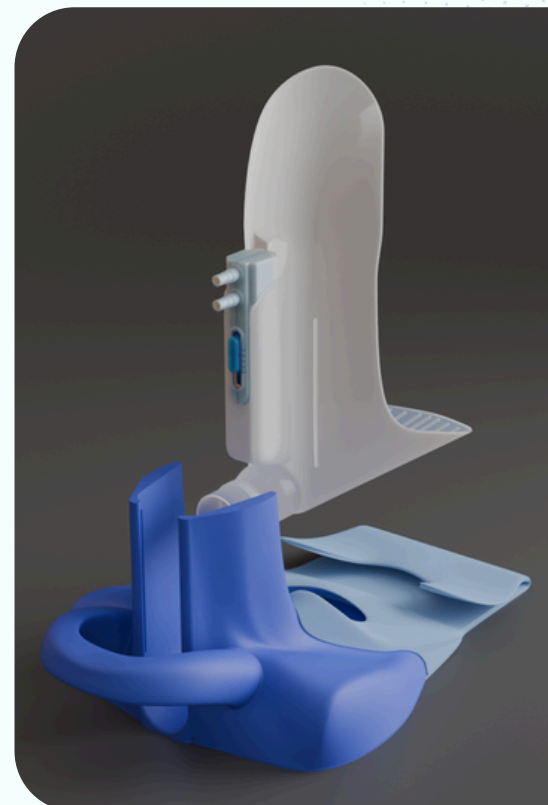
- **Reduces Pain & Anxiety:** An ergonomic, low-profile shell with soft padding slides into place with minimal patient rolling.
- **Restores Dignity:** Provides private, hands-free, and automated cleaning and drying, giving patients more independence.
- **Prevents Complications:** Directly lowers the risk of pressure injuries and bedpan-linked HAIs.

For Caregivers

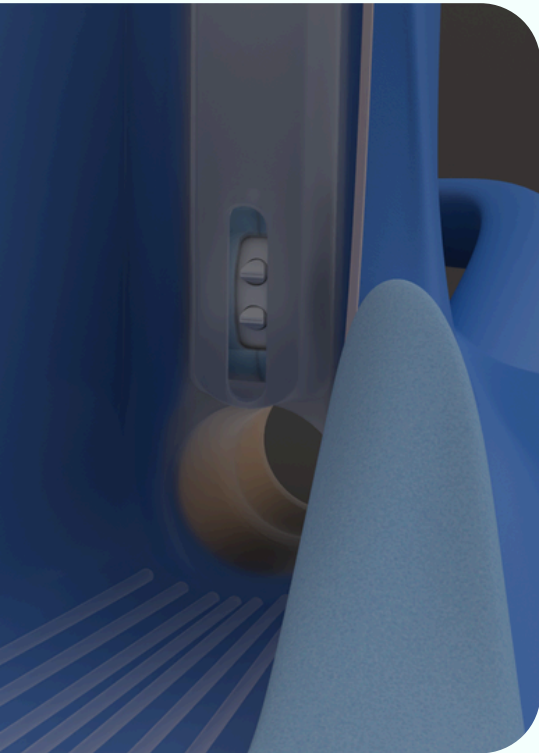
- **Prevents Physical Injury:** The slide-under design eliminates dangerous lifting, projecting a 40% reduction in musculoskeletal injuries.
- **Reduces Burnout:** By automating and containing waste, it removes the #1 ranked physical burden for caregivers, projecting a 30% reduction in toileting-related staff turnover.

For Facilities

- **Cuts Major Costs:** Directly reduces spending on costly, non-reimbursable events like HAIs, pressure injuries, and falls.
- **Drives Efficiency:** Cuts nursing time per toileting episode by 50% and reduces the need for a second caregiver.
- **Generate Powerful ROI:** Delivers over \$4.2 million in net annual savings for a typical 500-bed hospital.



Why now? – A convergence of market forces



1. The Silver Tsunami

- By 2030, 1 in 5 Americans will be over 65, representing the fastest-growing, most clinically complex patient demographic.
- 93% of older adults live with at least one chronic condition, increasing the need for toileting assistance and preventative care solutions.

2. The Caregiver Crisis

- The U.S. faces a critical nursing shortage, with a projected deficit of over 500,000 RNs by 2025.
- 45% of nurses are considering leaving the profession, driven by burnout and physical injury.
- This high turnover costs a single hospital up to \$5.8 million annually, creating a desperate need for tools that improve nurse retention.

3. The Financial Imperative

- The shift to value-based care means hospitals are now financially penalized by Medicare for poor patient outcomes.
- CMS programs directly target and penalize facilities for preventable events like pressure injuries and HAIs that The Bedet is designed to reduce.

4. The Cultural Shift to Bidets

- The U.S. bidet market is growing over 11% annually as consumer attitudes shift towards the superior hygiene of washing.
- This mainstream cultural acceptance has created a receptive market for a higher standard of hygiene in healthcare.

Market Opportunity – Under-innovated segment

TAM
\$2 B+

Global Market

- Combined reusable and disposable bedpan & hygiene systems market
- CAGR 4-5% through 2033

SAM
\$1.3 B

Disposable Liners & Pulp Segment

- Rapid adoption due to infection control
- Hospitals & LTC centers driving demand

SOM
\$400 M

North American Focus Market

- Hospital & Long-term care accounts for 75% of bedpan product usage
- CAGR 6-7% through 2033

Why This Matters:

- Disposable-centric markets = recurring spend → The Bedet can be a cost-effective, sustainable disruptor
- Stakeholders are already spending heavily to reduce HAIs and nursing burden

Competitive Edge

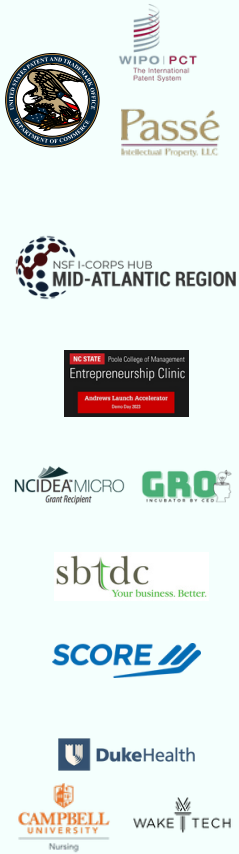
The Bedet is the only solution designed to address the complete toileting and hygiene needs of bed-bound patients in a practical, cost-effective, and non-invasive manner. The following table illustrates how it compares to existing alternatives

Solution	Manages Urine?	Manages Feces?	Provides Cleansing?	Primary Limitation
Traditional bedpan	✓	✓	✗	Labor-intensive; high risk of staff injury and patient infection. Leads to incomplete elimination.
PureWick System	✓ *female only	✗	✗	Does not manage bowel movements; gender-specific; high risk of leakage
Rectal Tube	✗	✓ *liquid only	✗	Invasive; only for severe diarrhea in ICU or critical care areas. High risk of pressure injuries and perforation.
Bidet Commode	✓	✓	✓	Not for bed-bound patients; requires physical transfer out of bed. Typically limited to home care.
Automated System (CareBidet)	✓	✓	✓	Extremely high cost and complexity; not portable or flexible.
The Bedet	✓	✓	✓	Fills the gap: An affordable, portable, all-in-one solution for all patients.

A fragmented market – **The Bedet is the first and only product to offer a total solution at a price point and complexity level that works for real-world hospital workflows.**

By leveraging existing infrastructure found in all acute care areas, The Bedet is ready to deploy in any facility today without requiring any external pumps, work-orders, or expensive proprietary equipment.





Our Progress

IP Protection

- IP release received from UNC Health
- Patent-pending status in US
- PCT application filed October 2024

Market Validation

- 130+ interviews with stakeholders (from patients to CNOs)
- Participation in NSF I-Corps

Funding

- Raised \$40,000 in non-dilutive grant funding and personal network investments

Clinical pathway established

- Predicates established for Class 1 510(k) exempt status
- Duke Health interest in pilot studies
- Partnered with local nursing schools (Campbell & Wake Tech) for use of their simulation labs

Business model rigorously vetted

- Participated in 3 competitive accelerators
 - NC State Andrews Launch Accelerator
 - NC IDEA MICRO
 - CED GRO Incubator

Product developed

- built and successfully tested multiple functional prototypes & infrastructure compatibility

The Team



Sebastian Heredia, RN
CEO | Co-founder
UNC Chapel Hill
 8 yrs. of direct patient experience



Laura Nelson, MYFCS
COO | Co-founder
NC State
 Community health practitioner



Kalea Davis
Biomedical Engineer
NC State



David Harrell
Business mentor
Helixomer, Inc. | CEO

30 years of leading, growing, developing, and scaling business to profitability. 3 successful exits in biotech & Pharma.



Linda Sanders
Leadership coach
Transition 360 Partners

Strategic planning & executive coach for F1000 executive leaders in academic medicine & healthcare. Entrepreneur-in-residence – Andrews Launch Accelerator.



Raj Sura
Finance & Strategy
UNC Kenan-Flagler, MBA

Financial analysis, portfolio & risk management. Bachelor's – Electronics & Comm. engineering. Former manager at Union Bank of India.



Bryan Duttman
Advisory board
MSN, RN, CWOCN

UNC Rex - healthcare management, legal nurse consultant.
Medline Industries - Skin Health Advisory Board.
President - WOCN Society, Director of conference planning.



Patti Williams
Business Consultant
Home health consultant

Over 20 years of experience as a nurse, home care agency owner, & consultant. Skilled in organizational structuring, business planning, and agency startups.

No external pumps, no work orders, ready today

