Filling the Dental Workforce Shortage by Helping Families Enter the Workforce

Alison Buckser, MPH Colleen Bichajian Martha Dellapena Mary Inglis Jennifer Giroux



Copyright 2007, Alison Buckser, abuckser@aya.yale.edu

Outline

Current workforce crisis
History of developing program
Program design
Lessons learned
Conclusion



Current Crisis in Recruiting Oral Health Professionals



Copyright 2007, Alison Buckser, abuckser@aya.yale.edu

National Crisis

 US faces serious oral health workforce shortage
 Too few dentists to care for publicly funded and special needs patients
 6,610 - 9,228 oral health practitioners needed to serve nearly 31 million underserved people live



RI Dental Workforce Shortage

No dental school in the state Only dental hygienist school in state closed RI needs 614 additional dental assistants by 2012 88 new dental assistants needed each year Two in-state programs trained dental assistants. CCRI has a nine-month program with graduation rate of 24 /year.

New for-profit program opened in 2005 with tuition at \$11,000/year.



Copyright 2007, Alison Buckser, abuckser@aya.yale.edu



Copyright 2007, Alison Buckser, abuckser@aya.yale.edu

RI Dental Assistants

X Act as a dentist's "third hand"

- Pass instruments and materials during the procedure
- Keep the patient's mouth dry and clear
- Help patients feel comfortable before, during and after dental treatment.
- RI does not require any certification or licensing for dental assistants to practice
 - The state only requires licensing to use radiology equipment.
 - Many dentists simply train interested individuals themselves.



History of Program



Copyright 2007, Alison Buckser, abuckser@aya.yale.edu

3-Year Development

- In 2003, RI Department of Human Services Center for Child and Family Health (CCFH) won RWJF grant
- One component to expand dental workforce
 CCFH, RIte Works, RI Kids Count, RI Foundation met in 2003 to develop program to train dental assistants
- Planned to recruit students from RIte Works' Family Independence Program (FIP)
 - Federally funded grant program that provides employment and retention services for up to 24 months for families receiving Medical Assistance
- Originally set up as training project in which dentists would have to hire students after internship completed



Locating a Site

- Leading obstacle throughout the development of the program
- Program's existence hinged on the use of a facility, since so much of the training would be hands-on.
- Originally the workgroup planned for CCRI to be the site.
 - CCRI bowed out of the program, stating that it had liability concerns
 - Safety net providers encouraged the program, but their operatories were too consistently in use
 - Cranston Adult Ed agreed to be the site, but backed out
- Scoup decided to build operatory
- Built at the RI Free Clinic which provides free care
 - It would use the operatory and provide free dental care



Building an Operatory

- The room to house the clinic was dilapidated, with old carpeting and peeling wallpaper.
- It did have a sink, was large enough, was on a bus line, and the building was around the corner from the RIte Works office.
- CCFH put up another \$6000 to rehab the room and found and negotiated with contractors.
 - Building permit had to be obtained,
 - Walls had to be stripped and painted,
 - Carpet had to be ripped up and new flooring put down,
 - Insulated closet had to be installed,
 - Complicated plumbing system for the chairs had to be designed and installed,
 - Dental equipment had to be installed
- Since there would be no further funding from CCFH, CCFH staff stripped and painted the walls, pulled up the carpeting, and arranged to have paint donated from a local hardware store.



Numerous Partners

- CCFH: Coordinated the project, located and set up the clinic, supplied bulk of funding, located additional funding, brought in partners
- Rlte Works: Provided strategic direction and guidance, provided students, supplied funding, taught portion of course
- RIC Outreach Programs: Coordinated logistics of pilot class, including instructor and dental internships
- Rhode Island Free Clinic: Provided space for class and operatory, paid contractors
- Rhode Island Dental Association: Provided advice, did outreach to members, facilitated grant and equipment donations
- Rhode Island Foundation: Provided guidance and advice, held grant funds
- 8 Rhode Island Kids Count: Provided guidance and advice
- © CCRI: Enrolled students and DAPP instructor into radiology class
- St Joseph's Dental Clinic: Provided internship site for two students
- Samuels Dental Clinic: Provided guidance and advice
- Crossroads: Conducted students' final clinical exam
- Providence Rescue Mission: Provided guidance and advice

Program Design



Copyright 2007, Alison Buckser, abuckser@aya.yale.edu

Dental Assistant Partnership Program (DAPP)

- Pilot project
- 8-week course
- Designed to help parents from low-income families enter the workforce as dental assistants.
- Classroom and lab work in an operatory
- Internships in volunteer dentists' dental offices.
- Each intern received a stipend for their work in the dental offices.
- Interns recruited from the Family Independence Program (FIP)
 - Dentists recruited from RI Dental Association members, safety net providers, and newspaper ads.
- Pilot class graduated in June 2006



Funding for the Pilot

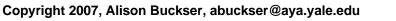
- Most funding (\$25,380) came from the CCFH.
- Central Rhode Island AHEC donated a grant of \$4,000.
- Sullivan-Schein Dental Equipment Company donated equipment of \$15,000 plus labor.
- RIte Works covered the cost of CCRI's radiology course.
- New England Dental Equipment donated equipment and labor worth over \$2000.
- Adler's Paint and Hardware donated paint and painting supplies.
- Private practices donated equipment and supplies worth over \$20,000.



Division of Labor

RIC was in charge of finding and hiring the instructor, ordering supplies (list provided by CCFH), lining up dentist for internships and paying rent.

- RIte Works would find and screen the interns and teach a portion of the class.
- CCFH would provide funds, prepare the clinic, develop a supply list, and locate additional equipment.



Supplies

- Cost of buying supplies for a private practice could run up to \$10,000
- Supply budget set at \$1500
- Private dental offices, the Providence Rescue Mission, and the New England Dental Equipment Services donated supplies and equipment.
- Donations included a wall x-ray, a panorex x-ray, a dental chair, handpieces, tabletop vibrator, dentist and assistant stools, a dental cart, an autoclave, two sterilization units, curing lights, a model trimmer, and an ultrasonic cleaner.
- All donations were made to the RI Free Clinic, which made the donations tax deductible.

Schedule

- Week 1:
- 30 hours classroom job/life skills, M-F
- Week 2:
- 30 hours classroom and lab, M-F
- Week 3:
- 30 hours classroom and lab, M-F
- Week4:
- 30 hours classroom and lab, M-F
- Week 5:
- 18 hours classroom and lab, M, W, F
- 12 hours internship in dental office, T, Th

- Week 6:
- 18 hours classroom and lab, M, W, F
- 12 hours internship in dental office, T, Th
- Week 7:
- 18 hours classroom and lab, M, W, F
- 12 hours internship in dental office, T, Th
- Week 8:
- 18 hours classroom and lab, M, W, F
- 12 hours internship in dental office, T, Th



Tests

- Weekly written quizzes
- No final written exam.
- Practical final exam with a practicing dentist and a certified dental assistant.
 - Instructor prepared charts with x-rays for different procedures.
 - Dentist came in, looked at the chart, and said "we need an MOD" and then the intern did what was required for that procedure, including PPE.
 - Interns either passed or failed.
 - Two students did very well, two students were fair, and one student was poor.



Weekly Quizzes

- Charting quizzes administered at random for reinforcement.
- Charting, anatomy of the tooth, definitions, dates of eruption
- Written description of setting up trays, questions on use of amalgam
- Landmarks of the face and oral cavity via fill in the blank and multiple choice
- Disease transmission and infection control via fill in the blank and multiple choice
- Principles and techniques of disinfection via fill in the blank and multiple choice
- Principles and techniques of sterilization via fill in the blank and multiple choice
- Overview of the dentitions via fill in the blank and multiple choice
- Principles and techniques of sterilization via fill in the blank and multiple choice
- Clinical proficiency evaluations were generally performed weekly on an informal basis.



Budget

Program Budget

Staff \$2,702
Utilities (rent) \$3,000
Student Supp. \$6,041
Uniforms, shoes, books
Iab supplies \$1550
graduation supplies \$200
Student stipends \$6,075 *Program total* \$19,568

Contractor Budget

Ð	Plumber	\$2,850
ð	Electrician	\$345
ð	Carpenter	\$2,438
ð	Supplies	\$537
ð)	Equipment	\$4,000
3)	Contractor total	\$10,170

Grand total \$29,738



Copyright 2007, Alison Buckser, abuckser@aya.yale.edu

Screening & Requirements

At least a 9th grade reading level Clean criminal background check Documentation of MMR vaccinations and Tb testing Strongly encouraged to receive tetanus and hepatitis vaccinations. Costs of all vaccinations were covered by Medical Assistance Tb testing was given at a free clinic.

Student Profiles

7 students started Program

- End of week 1, one student dropped out
- Beginning of week 5, one student asked to leave
- Single mothers on FIP
- Ranging in age from 18 years old to the mid-thirties
- All reported looking on the DAPP as an important opportunity.
 - One said on the first day of class that she planned to be off "welfare" in eight weeks, the length of the program.



Outcomes of Graduating Students

- Two left the state within a month of graduation
 - Both reported planning to get jobs as dental assistants in their new state.

Remaining three:

- One was hired as a dental assistant within two months of graduation.
- Second student interviewed and reported finding work
- Third dropped out of touch with the program



Lessons Learned



Copyright 2007, Alison Buckser, abuckser@aya.yale.edu

Challenges

- Most groups involved had never worked together before
 - Time had to be spent developing trust and working relationships.
- Finding a site was an enormous obstacle.
- Original focus of "training" locked the program into several conditions that were untenable.
 - Dentists did not sign up because of their reluctance with the "pre-hire" condition.
 - By changing the focus from "training" to "work readiness," many of these problems were resolved.
- Once the Cranston Adult Education Program backed out, it was necessary to find alternative funding for the pilot and another vendor.
- Liability was a huge concern at first, which dissipated once RIC became the vendor and covered liability.

Challenges, cont.

The class was too short at 8 weeks

- More They hit all the topics but could not go in depth.
- There was some wasted time in class, as questions took them off tangent.
- To stay on track and on time, prepare syllabus for each class.
- Some students were physically too big for the stools
- No time was allotted to do lesson prep.
 - Instructor invested a lot of time setting up the operatory and organizing
 - 35 hours per week: 30 hours teaching and 5 hours lesson prep.



Lesson: Internships

Internships are critical

- Gives real-world work experience
- Make the internship process as painless as possible for dentists
- Do not require that dental practices hire the interns.
- Screen dentists to find those who are willing to teach.
- Ensure that students know which vaccinations and screening they must obtain and where to get them
- Include as much hands-on work for students as possible before they go on their internships



Lesson: Budget

Use a fully functional clinic and include repair costs in the budget. If you must build a clinic, figure supply and equipment costs into the budget. Clarify before the equipment is donated whether installation costs will be included. Dentists are happy to give away used equipment

Lesson: Testing & Policies

Service Bring in a dentist to do a midterm to watch each intern and gauge where each one is performance-wise

- Solution Give the class the grading and homework policies from the start.
 - Determine how many tests they would have to pass in pass the class.
 - Set other rules, such as attendance policy, right away when the class starts.

Lesson: Support Network

- Support systems will be critical to their success.
- Those who had a support network, such as family or friends, were more successful.
 - One intern had support and the other did not.
 - Both interns were smart and determined to do well, but the support made it easier for one of them to really shine.
- Strong screening for this is imperative
- Lack of reliable transportation was a problem
- Students may take advantage of instructor and other staff



Miscellaneous Lessons

The books were fabulous: Elsevier

- Each student should have an instrument flip book.
- Order supplies early enough to set them up before classes begin
- Be careful not to have too large a class
 - 6 students ideal

Assign one person to shepherd the project through the obstacles from pre-implementation to graduation



Conclusion

- DAPP brought together many groups that had either not worked together or had only been loosely connected.
- Five women on FIP received skills that can help them obtain well paying jobs with good employment options.
 - Taught them that they could perform well in professional and school settings.
- The pilot showed where changes were needed, such as lengthening the course and performing a more rigorous screening of interns and dentists.
- RI Free Clinic has a dental clinic it can use in the future
 - Uninsured adults with nowhere else to turn will be able to obtain good dental care.

