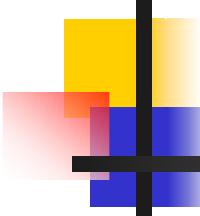


SRAP Grantees Mtg
Austin, TX
October 30, 2003

Recruitment and Retention through Scholarship, Loan Repayment and Related Programs

Donald Pathman & Thomas R. Konrad
Cecil G. Sheps Center for Health Services Research

UNC-Chapel Hill

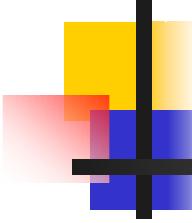


Goals

- **To discuss recruitment and retention outcomes, strengths and weaknesses of the various types of support-for-service programs**

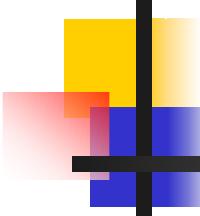
- **To learn from data on states' many and diverse programs.**
 - **To compare student vs. post-training programs**

 - **To assess role of buy-out penalties**



The Study

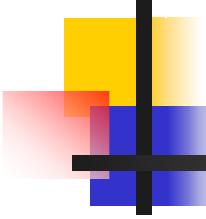
- **“Study of State Service-Contingent Programs for Health Providers”**
 - **AHRQ (R01-HS09165); 1996-2000**
 - **Pathman DE, Taylor DH, Konrad TR, King TS, Harris T, Henderson TM, Bernstein JD, Tucker T, Crook KD, Spaulding C, Koch GG.** “State scholarship, loan forgiveness, and related programs: the unheralded safety net.” JAMA 2000;284:2084-2092.
 - **Pathman DE, Konrad TR, et al.** “Medical training debt and service commitments: The rural consequences.” Journal of Rural Health 2000;16:264-72.
 - **Pathman DE, Konrad TR, et al.** “Outcomes of states’ scholarship, loan repayment and related programs for physicians.” In press.



State Programs Studied

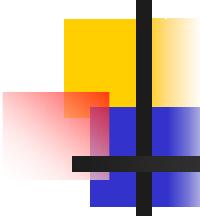
We identified all programs that:

- Provide \$\$ support to MD, DO, NP, PA, CNM trainees and young practitioners**
- Have service requirement or option in needy areas**
- Funded by states (w/o federal support)**
- Operating in 1996.**



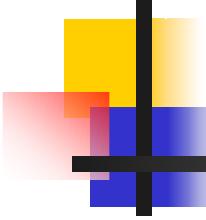
Methods: Identifying and Understanding Programs

- Used available compendia; PCAs; PCOs; networked**
- Interviewed directors by phone**
- Mailed surveys to eligible programs**
- Collected web info and key program documents**



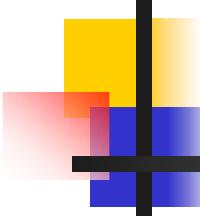
Methods: Surveying Physicians

- **29 of 48 programs old enough to have placed physicians provided names (60%)**
- **We surveyed by mail all 434 named generalist physician participants; 80.3% responded**



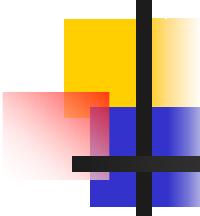
Methods: Comparison Group

- Stratified random sample of 723 med school grads from 1988 and 1992 practicing in generalist specialties
- Surveyed by mail; 72.8% eligible respondents



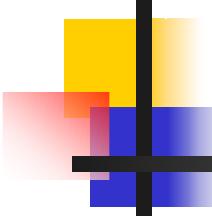
Findings: Programs

- **82 programs in 41 states as of 1996**
- **69 programs for physicians**
- 36 programs for NP/PA/CNM**



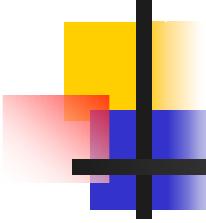
Program Types

Type	Who?	Service	Use of Funds
Scholarship (29)	Students	Required	Training
Serv Opt Loan (11)	Students	Optional	Training
Resident supp (5)	Residents	Required	Variable
Loan repay (29)	Practicing	Required	Training
Direct Finan Incentive (8)	Practicing	Required	Anything



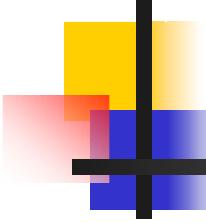
Field Strength, 1996

	State Programs	NHSC Schol + LRP
Physicians	1306	1000
NP, PA, CNM	370	515
Totals	1676	1515



Outcomes

- **Characteristics of service communities and patients**
- **Program service completion/default/buy-out rates**
- **Participants' satisfaction**
- **Program's retention rates**

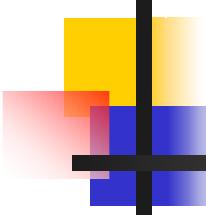


Service Communities and Patients

	Rural county	Median town/city population	Median town/city per capita income	Median county PC physicians to-population	Ave. % patients with Medicaid or uninsured
Obligated, all types	68.4%	5,094	\$10,813	78.5	48.5%
Non-Obligated	11.6%	56,129	\$14,090	118.1	28.5%

All comparisons p<.001

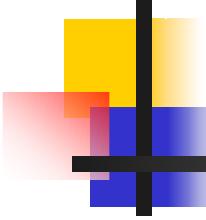
- Very few meaningful differences across program types



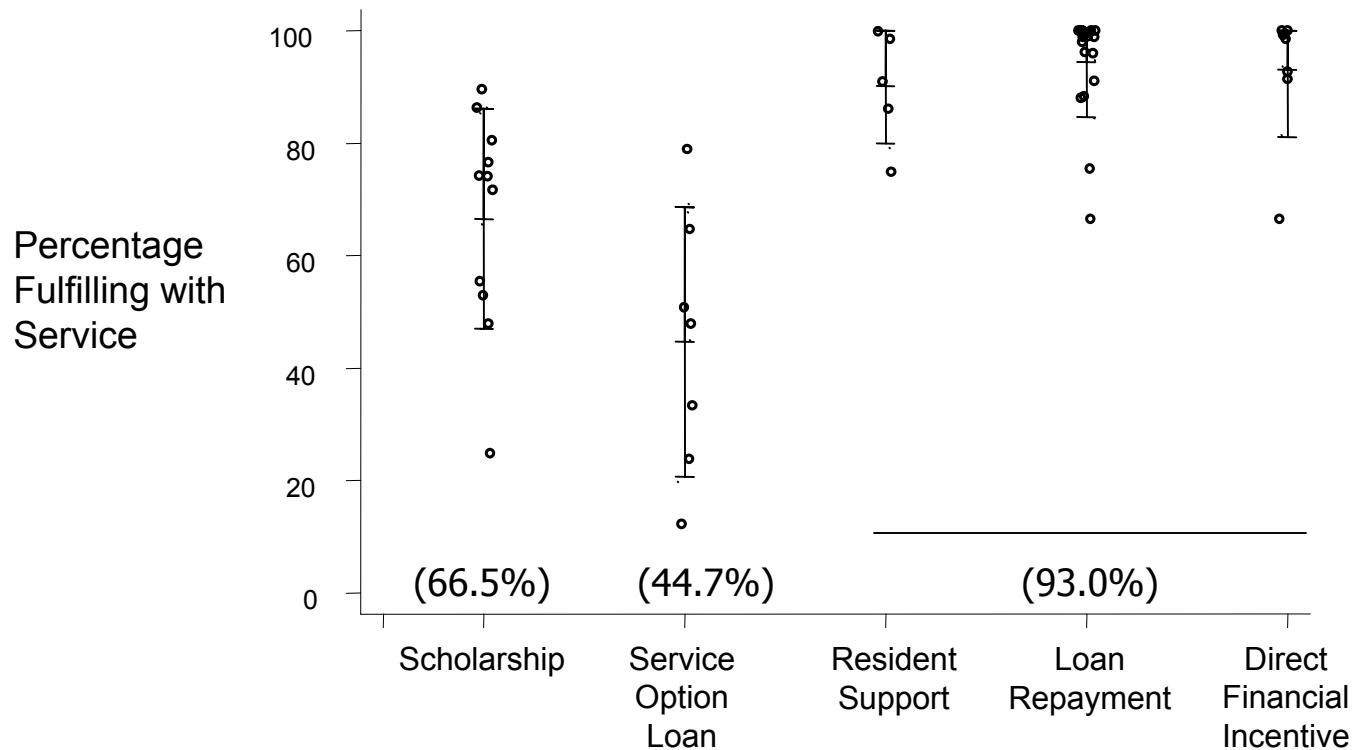
Program Service Obligation Completion Rates

Which programs have best service completion rates?

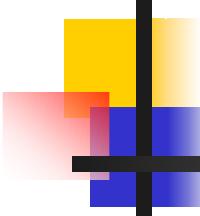
- Scholarship**
- Service-option loan**
- Resident support**
- Loan repayment**
- Direct financial incentive**



Programs' Service Obligation Completion Rates (n=69)

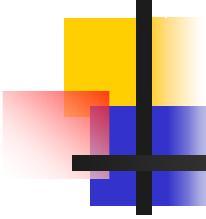


Bars denote group means +/- standard deviations; p<.001



Buy-outs vs. defaults

Program Types	Default Rates	Buy-out Rates
Service-option Loans	6.1%	49.2%
Scholarship	6.3%	27.2%
3 Post-training types	4.7%	2.3%



Buy-Out Penalties and Service Completion Rates

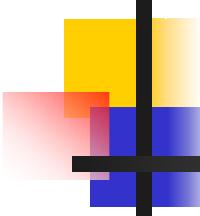
- **Affect student programs?**

**Yes! 4 student programs charging > 3 times principal
= 80.3% service completion rates**

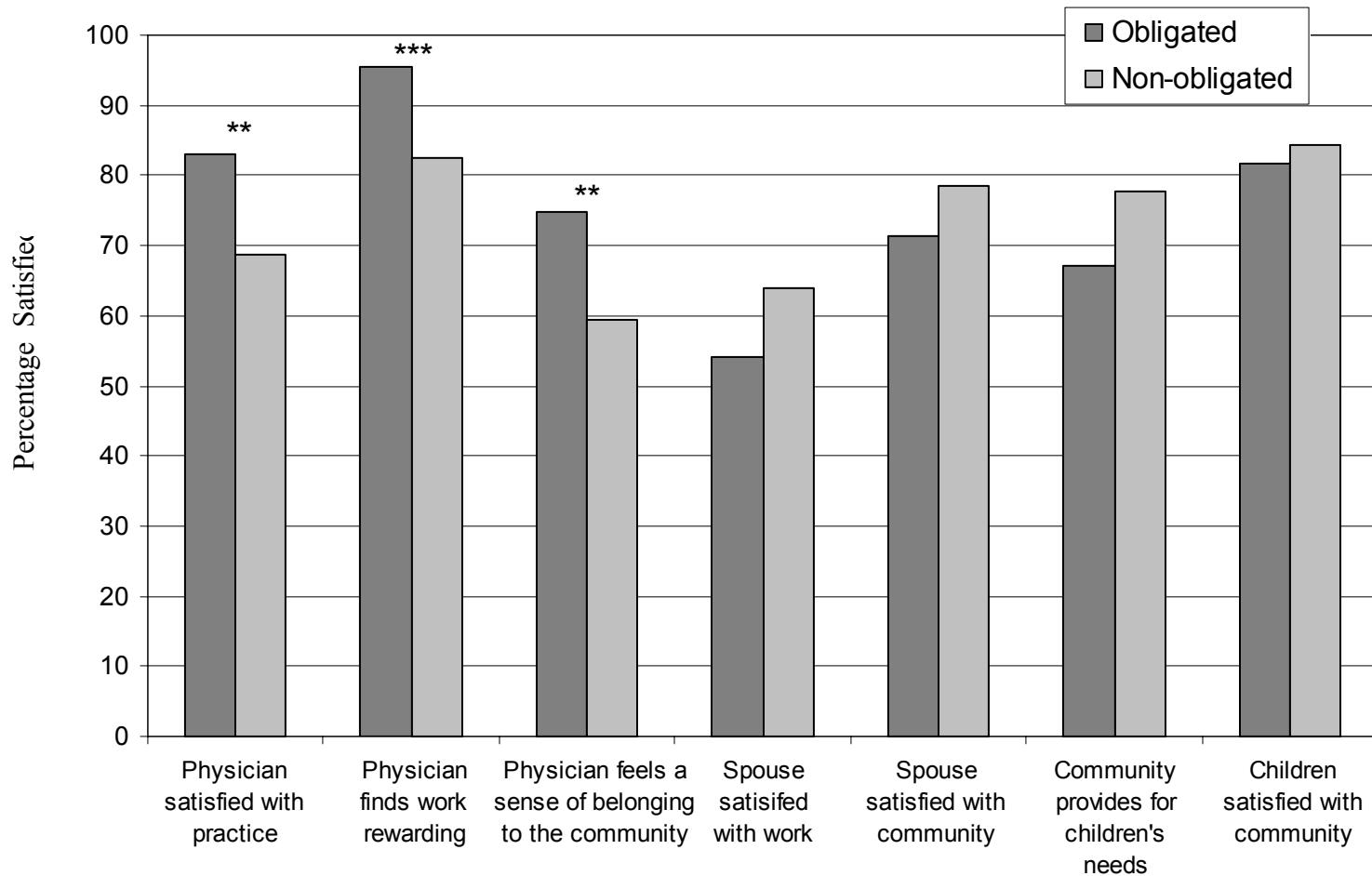
**12 student programs charging \leq 2 ½ times principal
= 48.6% service completion rates**

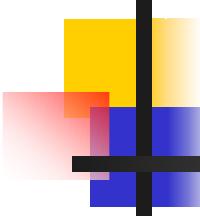
- **Affect post-training and resident programs?**

No! Only 2.3% buy-out regardless of penalty



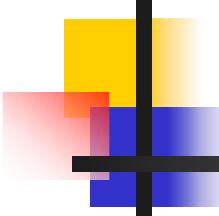
Satisfaction: Obligated vs. Non-Obligated



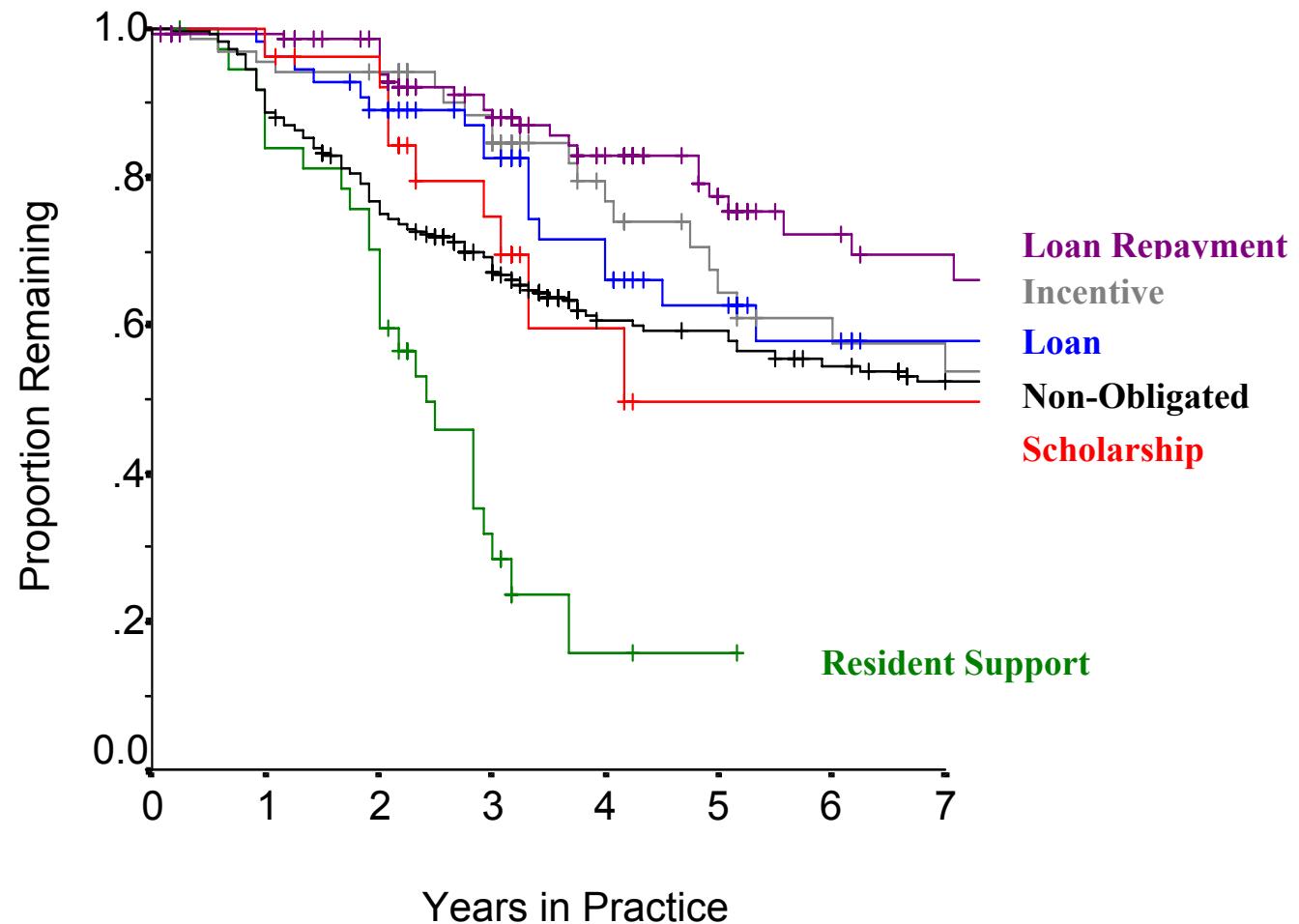


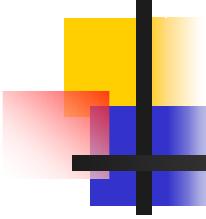
Satisfaction Differences Across Programs

- **Satisfaction generally comparable across program types. Except:**
 - **More participants of scholarship than other programs felt restricted in available service sites (36% vs. 19%; $p<.01$)**
 - **Fewer scholarship than loan repayment participants felt, in retrospect, they would definitely sign up for their program again (47% vs. 71%, $p=.01$)**
- **Among student programs, those with buy-out costs > simple P + I had broadly lower satisfaction scores, including only 37% willing to sign up if they had the choice again.**



Same-Site Retention





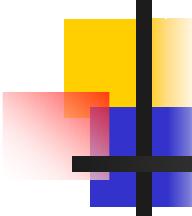
Effects of Buy-Out Penalties on Retention

- Affect student programs?

Yes! > P + I yields greater likelihood of leaving at each point in time (hazard ratio 2.5; $p = .04$)

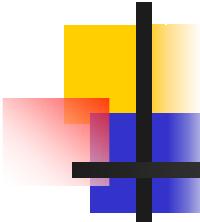
- Affect post-training and resident programs?

No!



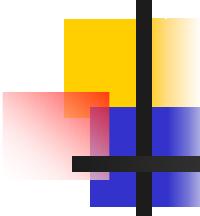
Lessons from These State Programs

- **Loan repayment vs. scholarship programs**
 - work in comparable settings
 - more loan repayers fulfill their obligations with service
 - loan repayers are happier in few key ways
 - loan repayers are longer-retained in their service sites
- **Buy-out penalties**
 - for student programs, high penalties curtail buy-out rates by 1/2 but at the cost of lower group morale and shorter retention
 - penalties have no role in loan repayment and other post-training programs; they aren't needed



Lessons

- **Service-option loan programs**
 - generally excellent outcomes (service sites, satisfaction, retention)
 - low service completion rates: is this really a problem?
- **Direct financial incentive programs**
 - excellent outcomes
 - why not?
- **Resident programs**
 - too early to tell



Lessons

- **For programs where service is required, recruit later in practitioners' careers**
- **Foster good practitioner-community matches**
- **Build satisfaction among practitioners—you attract more flies with a teaspoon of honey than a barrel of vinegar**



Same lessons we have learned for retaining non-obligated physicians---see handout