The Impact of Decentralized District Partnering on Scaling up Community-based Health Sector Reform in Ghana

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Decentralizing health service management has been a priority of health sector reform in Ghana since the mid-1990s. However, meaningful progress on this goal was not achieved until 1999 when Ghana extended decentralization to the community level—launching the Community-based Health Planning and Services (CHPS) Initiative. Guided by research in Kassena-Nankana District by the Navrongo Health Research Centre, CHPS scales up Navrongo approaches to social mobilization for supporting and implementing community health services. Milestones in the scaling-up process involving local planning, on-the-job training, locally financed health facilities development, and volunteer mobilization are achieved by forging partnerships between district health managers, service providers, and communities. Two District Health Management Teams that have completed implementation—Kassena-Nankana and Nkwanta— have demonstrated functioning community-based services to teams from other districts during the 1999 to 2004 period. This paper assesses the impact of the peer training strategy on CHPS implementation in the 108 other districts of Ghana.

By July 2004, CHPS had been launched by 105 out of 110 District Health Management Teams. Nonetheless, actual service coverage of implementation milestones varies markedly by district. This paper exploits this variation to evaluate the effect of decentralized district peer leadership training on the percent of district populations covered by six CHPS scaling up milestones. Regressions employ random effects generalized models to assess the effect of exposure to peer training exchanges on the pace, content, and spread of CHPS over 90 day rounds of observation for 110 Ghanaian Districts observed since January 1, 2001. Results show that decentralized approaches to Navrongo and Nkwanta peer leadership catalyze and accelerate community involvement and community-based services but have no impact on the implementation of volunteer mobilization strategies. The magnitude of estimated effects, while statistically significant, are weak, suggesting that training alone is insufficient to foster rapid implementation of the CHPS initiative. Qualitative data are marshaled to facilitate interpretation of statistical results. Focus group exchanges among panels of program participants clarify ways in which peer exchanges foster scaling up while also demonstrating ways in which critical resource gaps constrain progress. Policy implications of findings are reviewed and discussed.

Figure 1 presents the time series in CHPS implementation for six coverage milestones; Table 1 presents random effects regression results of exposure to CHPS orientation. Monitoring results show that national reports on district health management team participation in CHPS greatly exaggerate actual progress in rolling out the program. This conclusion is evident from the six time series in Figure 1. Nonetheless, orientation in Navrongo and Nkwanta accelerates the implementation of CHPS (Figures 2 and 3):

i) "Community Health Service Planning" refers to a series of activities that move beyond district level planning for CHPS. Districts are divided into work areas where nurses are to be posted and involved in community health service outreach. Planning involves delineation of zones, enumeration of populations, and clarification of the optimum location for nurse residences. As Figure 1 shows, the initial launching of CHPS was accompanied by a pronounced increase in the coverage of community health planning. However, the scaling up of this milestone has reached a plateau at approximately 18 percent of the population covered. Districts exposed to training do not experience this plateau. Regression adjusted results in Table 1 control for trends in the past. Parameters suggest that field exchanges contribute to the pace of CHPS sponsored scaling up.

ii) Once planning is completed, community diplomacy is launched, involving outreach to leaders, constitution of community health committees, and other mechanisms of leadership and community participation in the program. This series of activities is termed "community entry." This phase of CHPS introduction covers only five percent of the population.

iii) Communities are engaged in the construction or renovation of facilities where nurses are assigned to live and work. Zones with "Community Health Compounds" comprise slightly more than the population covered by the "Community entry" milestone. Nonetheless, coverage remains low and trends have reached a plateau.

iv) and v) As Figure 1 shows, the purchase of essential equipment and the actual posting of nurses cover only about three percent of the population. This means that CHPS sponsored community health services remains rare in Ghana.

vi) Volunteers are to be recruited to work in support of nurses. As the time series shows, the introduction of volunteer coverage is not occurring.

While CHPS is not rapidly expanding in Ghana, evidence suggests that comprehensive orientation to the program may address this problem. Figures 2a/b compare districts unexposed to peer orientation in Navrongo with the milestone time series for districts exposed to the Navrongo training program. Similarly, Figures 3a/b compare the series for districts unexposed and exposed to Nkwanta training. Both diagrams suggest that exposure may contribute to scaling up of the CHPS decentralization process.

Aggregate data merge district mean coverage, irrespective of the duration of exposure. Therefore, to test the hypothesis of training impact, random effects generalized regression models assess the impact of training on district coverage of CHPS over time, controlling for the 10 regions where districts are located. Results of regressions appear in Table 1. Navrongo training had an impact on all CHPS milestones; Nkwanta training has had an impact on planning, community entry, community clinic construction, and the posting of nurses. Findings thus demonstrate that the CHPS approach to district-to-district peer training fosters the process decentralization. Results show that district partnering represents an effective means of translating the rhetoric of health system reform and decentralization into health services in communities.

Table 1: Random effects regression analyses of the effect of exposure to peer 42 exchanges in Kassena-Nankana and Nkwanta Districts among 108 District Health Management Teams in Ghana observed in 90 day cycles over the January 1, 2001 to July 31, 2004 period.

Independent variables	*Community health service planning*	*Community entry*	*Community health compound completion*	*Community Health Officer deployment*	*Essential equipment procurement*	*Volunteer deployment*
District population x 100,000	+6.23**	-1.39	-3.78	-2.67	-4.45	-2.17
Navrongo index	+0.85**	+0.75**	+0.75**	+0 .43**	+0.39**	+0.30**
Nkwanta index	+0.35**	+0.36**	+0.36**	+0.26**	+0.06	+0.02
Ashanti	+36.88*	-2.05	-2.29	-0.57	-1.62	-0.85
Brong Ahafo	+41.17**	+0.21	-1.21	+0.05	+3.65	+0.49
Central	+31.12*	-1.97	+0.49	-0.12	-1.68	-0.33
Eastern	+33.06*	+2.34	+1.58	+1.02	+0.30	+0.95
Northern	+29.99*	-3.70	-2.85	-3.20	-2.14	-1.73
Upper East	+32.56*	+2.55	+14.73	+3.82	+4.62	+1.85
Upper West	+20.89	-10.31	-2.57	-6.01	-6.72	-4.52
Volta	+41.02**	-1.31	+5.79	+4.71	+5.06	-0.46
Western	+34.67*	+3.69	+3.80	+1.46	-1.54	-0.23
Constant	-32.76*	+1.29	+2.16	+1.65	+2.54	+1.24
Sigma u	+18.52	+6.82	+9.30	+6.73	+8.84	+4.60
Sigma e	+5.70	+4.75	+5.13	+4.00	+4.40	+2.74
Roh (fraction of variance due to u_i)	+0.91	+0.67	+0.77	+0.74	+0.80	+0.74

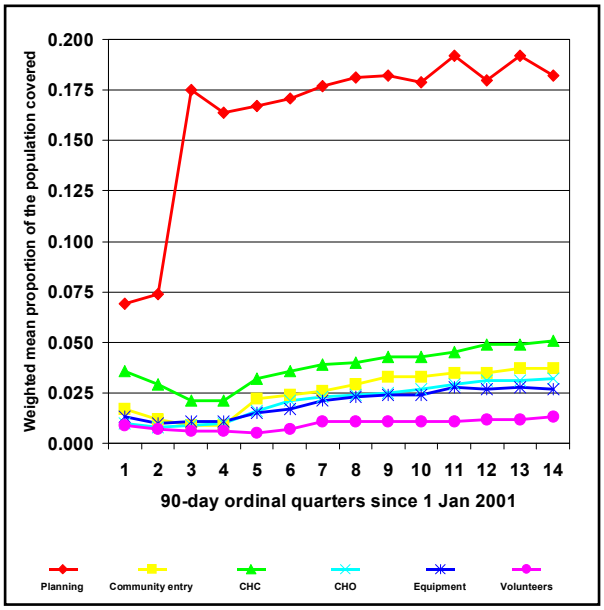

Figure 1 Population weighted mean proportion covered by six CHPS milestones in all 110 districts of Ghana

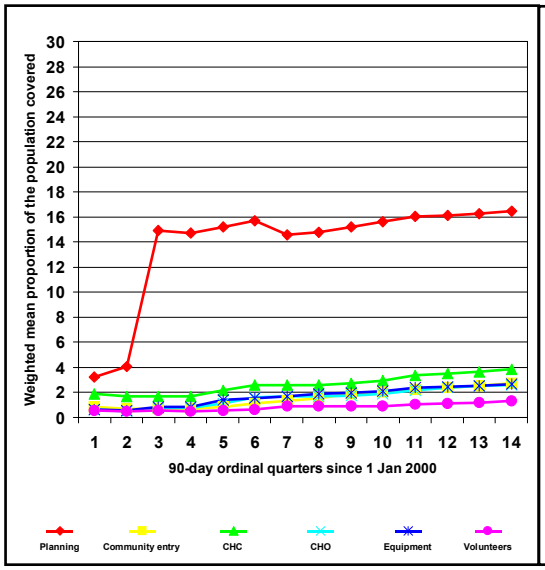

Figure 2a Population weighted mean proportion covered by six CHPS milestones unexposed to Navrongo training

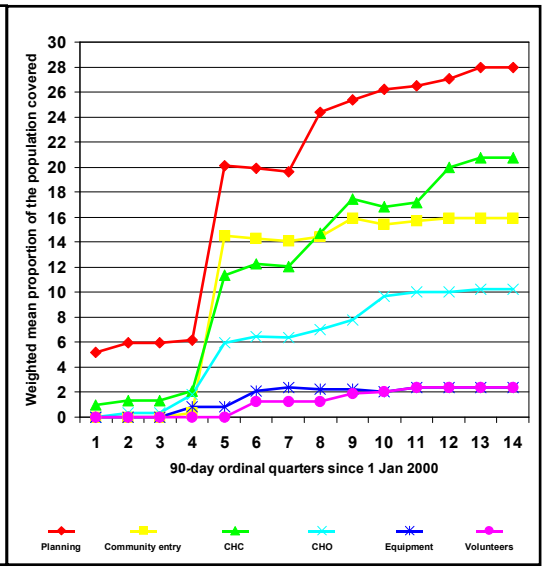

Figure 2b Population weighted mean proportion covered by six CHPS milestones exposed to Navrongo training

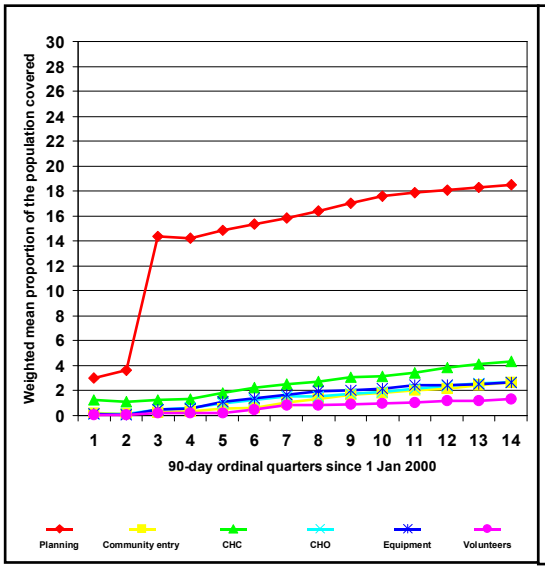

Figure 3a Population weighted mean proportion covered by six CHPS milestones unexposed to Nkwanta training

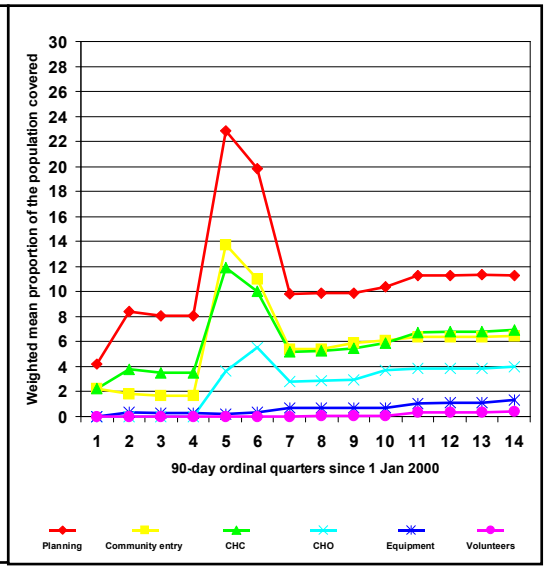

Figure 3b Population weighted mean proportion covered by six CHPS milestones exposed to Nkwanta training