Chhattisgarh Experience with 3-Year Course for Rural Health Care Practitioners - *A Case Study*

[NHSRC, PHFI, SHRC- Chhattisgarh]

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Recruitment for Provision of Rural Health Care

Situation Analysis

The state of Chhattisgarh was carved out of south-eastern Madhya Pradesh (M.P.) in late (November) 2000. With regard to key socio-economic and health indicators (including IMR and MMR), this state lags behind the rest of the country. Although geographically the ninth largest state, covering 135,194 sq.km, its rank by population size would be much lower as its population of 20.83 million (2001 Census) is dispersed with a population density which is half that of the national average (154 for the state as against 312 per sq.km for the country). One thirds of its population is tribal, the highest amongst large states and 40% of the land areas is classified as forest lands, Of the 18 districts of the state, 12 are classified as remote, tribal and extremist affected areas.

Providing health care is a human resource intensive activity, and in Chhattisgarh state the shortage of trained health care providers is among the most acute in the entire country. The state has 4692 sub-centers sanctioned and of these almost one-third do not have even a single ANM, though they are expected to take on two ANMs. Only 540 staff nurses are available against the 1344 required by IPHS norms for working in primary and secondary public health facilities in Chhattisgarh (National Health Systems Resource Centre (NHSRC) and Academy of Nursing Studies, 2009). The shortfall for doctors both MBBS graduates and Specialists is about 72%, with 1455 medical officers posted at PHC against the posts of 1737 and only 247 specialists available against the sanctioned 637 posts (State PIP 2009-10). The shortfall in doctors is even more severely felt as the vast majority of the inadequate numbers that do exist are located in urban or semi-urban areas, with certain large tracts of rural and tribal areas almost devoid of even a single doctor-(with MBBS qualification).

At the time of its bifurcation from the state of Madhya Pradesh,, Chhattisgarh had no government nursing college and only a single private college of nursing admitting 30 students for a four year BSc Undergraduate degree course. . Four years after the creation of the state, the Government College of Nursing started functioning at the state capital, Raipur, with an annual intake of 33 students. At present there are 2 colleges that offer postgraduate programmes in nursing (M.Sc), 10 colleges that offer undergraduate degree courses in nursing and 4 that offer diplomas in nursing (GNM) all of which are in the private sector. In 2000, there was a single medical college in the entire state admitting 100 students, and even this was considered one of the least favored medical colleges by students in undivided Madhya Pradesh. This was because it was relatively poorly staffed and a limited reputation for quality and outcomes. This college had to be strengthened after the creation of the state, and a second medical college opened in August 2002, got recognition in 2006 and a third was initiated in July 2007. Two further medical colleges remain in the pipeline. Though for a state these are rapid strides forwards, it would be quite some time before this would translate into increased recruitment in public sector recruitment. The immediate impact of a new states was a stagnation or even a small drop in the

number of doctors in 2006 as compared to earlier (see table 1) which could be due to the fact that the rapid urban and industrial development of the state could support a larger number of doctors in private practice. In the year 2001 only 516 medical officers were available at PHC level out of total of 1455 sanctioned posts. By 2571 it had increased to 1345 but this was still only about half the number of sanctioned posts. As the numbers of facilities rise to meet the national norms, and as the number of posts rise to meet the IPHS norms the gaps between what is posted and what is needed would become even more. For example the table below shows that 6470 posts of ANM and LHV are sanctioned- but if the second ANM as mandated by IPHS is sanctioned that would push up requirement by another 4692 ANMs.

Table 1: the Changing HRH situation in Chhattisgarh State

	In year 2002-03		In year 2006-07			In year 2002-03		In year 2006-07	
Facility	Sanctioned	With sufficient infrastructure and facilities	Sanctioned	With sufficient infrastructure and facilities	**Cadre**	Sanctioned	In position	Sanctioned	In position
Sub-centers	3818	1458	4692	1853	ANMs + LHVs	5729	4667	6470	5275
PHCs	513	327	717	400	MPW + supervisor	3785	3121	4467	3149
CHCs	114	34	133	70	Medical Officers	1455	516	2571	1345
District Hospitals	6	6	16	14	Specialist	291	103	1006	291

Source: –SHRC, Raipur

As evident from the table above, since the formation of Chhattisgarh, the largest challenge the state government has faced in the health sector is the human resources challenge. Chhattisgarh had one of the lowest human resource denisities in India, and perhaps one of the lowest anywhere in the world. To address the challenge with respect to physicians, one of the options that the state government considered was the option of a three-year course to train medical professionals or three year doctors as it was then popularly known to serve in rural areas.

The Policy options in Chhattisgarh[1]

The initial idea of a 3-year diploma course for training a health care practitioner for rural areas stemmed from the new Chief Minister's office and was a result of his direct intervention. The initial logic was that if candidates from rural areas are brought into a 3-year diploma programme,

[1] This Case Study is a result of information collected through extensive interviews with key informants representing different stakeholder interests within government and outside, including a focused group discussion with over 40 graduates from the 3-year courses and 12 'Rural Medical Assistants' (RMAs) currently in government employment. In addition, all published documentation related to the 3-year course or to the RMA postings has been drawn on. Finally, the Case also contains primary data collected and expressed here for the first time. The authors are grateful to all who participated in this study, in providing or facilitating information on this case.

they would be more likely to return and serve in such areas. Their opportunities for urban private sector employment would be less. Another rationale that was articulated was that a formally trained skilled provider in the underserved areas of Chhattisgarh would serve as a better than to the "*jhola chaap*" doctors practicing in these regions. This is a term that derisively refers to the unqualified practitioners of modern medicine that has mushroomed over the villages.

Given the fact that the outcomes from new medical colleges would take over six years to be visible, a three year course would yield results within the political lifespan of the government of the time. Moreover, starting new medical colleges, conforming to guidelines of the Medical Council of India (MCI) required significant capital investment from the government and recruitment of human resources. Even if the financial resources were to be found, the human resources would be difficult, for even the existing state college in the state capital was facing shortages of key faculty members.

The Implementation Process of the 3-Year Course

Formation of the Chhattisgarh Chikitsa Mandal (CCM)

From early 2001, when discussions to the three year course began, opposition from the Medical Council of India, the professional council regulating medical education, was anticipated. In discussions shared among the Health, Law and General Administration Departments, it was agreed that the powers of recognizing the council which would approve the three year course should be given to a body created for the purpose through an Act passed in the Chhattisgarh state legislative assembly. The MCI would thus not have to approve the course. Such a State Act could be passed by the state without requiring the approval of the central/federal government or the president. MCI was however contacted and they formally rejected this course, even without going into any discussion of objectives or course content. The Chhattisgarh government however proceeded, using existing precedence of West Bengal having briefly implemented such a course and with the knowledge that in Maharashtra and Karnataka, where similar courses had been implemented. The operationalization of the plan was given great urgency by the political leadership. Within days of the decision, a committee was formed in the Health Department. Within the month, a committee of senior secretaries presided by the Chief Secretary forwarded a letter of approval to the Chief Minister (CM). Still within the same month, the CM signed for the legislative assembly to meet to consider a proposed bill. The very next month the assembly met and passed the act. The notification rules were drawn out and printed as an extraordinary Gazette on 18 May. The state assembly accepted these rules four days later and the e Chhattisgarh Chikitsa Mandal (CCM) came into existence.

One important reason for such a quick process was the clearance or no objection from the Finance Department. The principal reason for quick clearance by the Finance Department was the explicit understanding that the CCM would be an autonomous body with no financial burden to the state government. The CCM was expected to raise its own finances through fees charged from private agencies in return for being given permission for starting institutes which would run these 3-year courses and later to be supplemented by through registration fees charged to graduating three year doctors. Private managements of these institutions were expected to recoup these losses and make a profit through tuition fees. The costs to the government of running the

CCM were expected to be minimal with a total of only three officials linked to the new registration body; all of whom were already on government payrolls and were being seconded for the task. The CCM comprised the Director of Health Services as President, the Dean of the Medical College in the state capital as Vice-President and a district chief medical officer to be seconded in as Registrar. With such limited initial capital and human resources in CCM, the new registration body was a limited institution.

The powers that the CCM was authorized with, however, were not so limited. It was initially given several responsibilities: (i) to inspect private bids made for starting the new institutes for the 3-year courses, (ii) to be the nodal authority in-charge of the admissions process of the students to these institutes, (iii) to have power to change the syllabus of the course, (iv) to fix norms and guidelines for charging tuition fees for the 3-year course, (v) to be the authority charged with undertaking the examinations process as well for this course; and (vi) to be the registration body for graduates from the 3-year course. These were far more powers than the state medical council had and even more than the Indian medical council had for its regulation of medical courses..

Opening of the Institutes

Since the 3-year course was not going to be public funded, the institutes for imparting this education were all planned to be private. The locations proposed were in rural/tribal districts, but with access to a large government hospital usually the district hospital to make it possible for clinical teaching and internship. Fifteen applicants responded to an expression of interest advertisement by the government. It is notable that although the CCM was charged with the responsibility of initially inspecting the infrastructure and facilities available for the first year of non-clinical teaching alone, the final selection of the initial three institute locations was solely with the state government. First three colleges were inaugurated in October, 2001 at Ambikapur, Jagdalpur and Pendararoad. At this stage, the syllabus for the remaining two years was still not prepared. Three further institutes at Kwardha, Katghora and Kanker opened a year later in end 2002, with two of these going to two owners of the first batch of institutes opened. Although initially it was decided that each institutes would have maximum of 100 students, all the six institutes were allowed to admit 150 students per year. The student admission was in three categories:

1. 50 % free merit seats – 75 seats,
2. 35% payment merit seats – 53 seats
3. 15% NRI seats – 22 seats.

There was only a 20-day period for applications to the first three institutes, but even in this short time there were approximately over 9,000 applicants who applied for admission to these three institutes in the first year. Admissions happened for three years before the course was stopped. For the first year, CCM conducted the admissions as per the provisions of the Act. In the subsequent years when the institutes took the lead through an association they formed called the "Three Year Medical Institute Association of Chhattisgarh" (TYMIAC). The cut off for the

admissions of the first batch was 75% in the required the school-leaving examination, with inclusion of Biology being compulsory. In the first two years, eligible candidates were called for interview in the order of their scores in the school leaving examination, and given the seats in the institutes of their choice, against vacancies that existed at the time of their appearance- a process that has of late being called counseling – though in fact no counseling occurs. This counseling was centralized and held at Raipur. In the third year of admissions, even this centralized counseling was given up and admissions were directly done at each institute. For entry to the third batch, there was a significant fall in the number of interested applicants as compared to the first batch. The reasons for both these developments are explained below.

The influence of legal issues on the Name and Content of the Course

The Indian Medical Association (IMA), representing largely private doctors, opposed the idea of a 3-year course of medical education as a dilution of the standards of the medical profession. Not surprisingly, therefore, the IMA filed a case questioning the legality of the Chhattisgarh three year course almost immediately after the CCM Act. Even though there was no verdict in favor of the IMA, the state government's engagement with the three year course was almost exclusively dominated by its having to survive this legal challenge and to find the legal space to start and continue with this course. Such primacy to legal sanction, did manage to keep the legal space open, but it came, at the expense of attention to other issues that were equally important, if not more, to the actual functioning and to the institutional support the course may ideally have had. Above all, there was very limited clarity on three vital issues- the syllabus, the exact identity of the graduating students, and institutional provisions related to standards and the transparency of process – especially admissions, hiring of faculty and maintenance of quality in certification.

The first influence of the pending legal battle over the 3-year course was the change in its name, even before the course formally started. At the time of the CCM Act, the 3-year diploma course was to create a "Practitioner in Modern Medicine & Surgery". Three months later, however, the course was re-titled "Diploma in Alternate Medicine". This was a direct response to the legal concerns with the use of "Surgery" and modern medicine in the title, both of which attracted clearance from the medical council of India which had not been consulted. To justify this claim to "Alternative Medicine", there were subjects introduced to the syllabus that had not been considered before – *viz.* biochemic medicine, herbo-mineral medicine, acupressure, physiotherapy, magneto-therapy, yoga, and Edward Bach flower remedies and acupuncture indeed every possible alternative medicine name that could be thought off.

Institutional hurdles faced and created: Speedy implementation at a cost?

The unusually rapid progress in setting up these courses, despite legal hurdles related to the strong political will – in the form of the chief minister's personal and explicit priority for this scheme. Internally there was administrative reluctance to rush through such a course. The IAS officer who was secretary to health was relieved of this task and the task was handed over to a faculty member of the preventive and social medicine department who was designated as an" officer on special duty" reporting to the health minister directly and with many of the powers of

the secretary. The ostensible reason was that the health secretary has several tasks whereas the OSD brought from outside the career civil services was appointed explicitly to deliver on the 3-year course. The health secretary, not being the reporting authority for the OSD, had no reason to be involved with this 3-year program henceforth. The Director of Health Service, while the officiating President of the CCM, is a senior career government official mandated to oversee much more than the CCM and has an important working relationship with the IAS health secretary to preserve. In contrast, the post of OSD, perceived to be a 'temporary political appointment', commanded far less compliance from the Director of Health Services and other senior career officials compared with the authority of the health secretary. This resulted in a working environment where the OSD had limited cooperation within the government – and there was little sharing of information and a lack of ownership of this course. It is also within this strained working environment with other key health officials that the OSD sought to bring important 'corrective' changes. After the first year of the course had already begun, it was decided to affiliate the private institutes to the established universities in Chhattisgarh and to bring the exams under the purview of these universities instead of the CCM as stipulated in the May 2001 Act. It was also decided that the authority responsible for admissions to the 3-year diploma course be transferred from the CCM (as under the Act) to the private institutes. The underlying rationale driving both these midstream changes was a revised assessment of the CCM aimed at reducing its powers. The CCM created through the May 2001 Act was no longer deemed a legitimate body, in this revised perspective, to conduct examinations; instead the universities were expected to better facilitate recognition for the course. These changes again had unintended but deleterious effects on the course. First, the attempt to link the course to the universities delayed the first-year examinations by nearly half-a-year and became the initial cause for the course getting derailed in its schedule (see Table 2). Second, the CCM or any single independent nodal agency was far less directly involved in the admission of the second batch to the diploma course and indeed for the admission of the third batch in 2003, many seats were "filled on the spot" without Counseling, with no quality standards on an almost walk in basis.[2]

As part of this revised perspective on the CCM, the name of the 3-year course was changed yet again to "Diploma in Holistic Medicine and Paramedical Course" in March 2003 through an internal government order. The thinking behind this change was that the change of name would pave the possibility for graduates of this course to be registered with the State Paramedical Council and not under the CCM. The state paramedical council would be less likely to be legally challenged than would the CCM as it would be clearly outside the purview of medical councils and associations. The name change, however, struck a problem from another quarter, this time the students. The students launched an agitation declaring that the term "paramedical" was a dilution of the status of the course, away from the medical profession to which they desired affiliation. The name of the course instead was revised again following the July 2003 student strike to "Diploma in Modern and Holistic Medicine". Therefore, legal and political issues, rather than any dialogue over the aims and purposes of the course, governed the decisions to

[2] Moreover, anecdotal evidence suggests that the vacant free and management seats were converted into NRI seats with a fee structure of 1.5 lakh per year.

change the name of the course several times and with it, its stated curriculum. Lacking clarity in objectives from the very beginning, these changes only added to the confusion.

The legal and political turns and twists also led to constant redefing of the syllabus of the 3-year course. The initially designed syllabus for the 3year course was a scaled down and trimmed version of the MBBS curriculum with some additional subjects of AYUSH(the indigenous steams), alternative medicine and public health added in to justify the term "Alternate" and thereafter "Holistic". Two Inspection committees in 2004 and 2005 examined the syllabus and recommended changes in syllabus to make it more appropriate for the epidemiological needs of the rural and tribal population- but these were not carried out. The only modifications made related to alternative and holistic medicines and was done to justify the new names of the course.

The change in the state government after the November 2003 elections brought all issues of course objectives and identity of the graduates into a fresh review. The new political regime, dropped officer in-charge of the 3-year course (the OSD) as a political and irregular appointment, The health secretary who had been pushed aside to make way for the OSD was brought back to re-formulate policy on the course after a gap of almost two years. The government was now willing to define the course objectives more clearly, but they faced a situation because the courses were in an advanced stage with three batches studying and students resorting to agitation to safeguard both their identify as doctors and to gain employment prospects from the government.

Delayed Clarity: Student Agitations and closure of further admissions

At its inception and when the course was initially for training a "Practitioner in Modern Medicine & Surgery", it was not clear whether the 3-year course would be a "diploma" or "certification" course. The precedence in West Bengal that influenced the making of the course in Chhattisgarh was a diploma program. There exists also an, instance of a 3-year certificate courses, such as the one run by the national AIDS program of the country..

At the time of admissions, almost all the students were given to understand that they would graduate as a three year trained doctor with a high likelihood of government job in rural and tribal areas due to the significant vacancies that exist in primary health centers (PHCs). This belief was based on media statements and coverage and on verbal assurances of the state government, but no order to this effect had ever been issued. As the verbal assurances failed to be followed up and as students had enrolled, some of them after paying fairly high tuition fees or in some cases capitation fees, the students became restive. There were several agitations of students, promoted by institution owners and supported by political interests of districts in which the institutions were located and from where the students came. In total there were three major strikes.

The main reason for the first strike of students in January 2003 was a demand to change the name of the course from "Alternative Medicine" and to secure guaranteed government jobs. The name of the course was changed following this strike.

The second major agitation was in July 2004 for change of the name from "Diploma in Modern and Holistic medicine" to "Practitioner in Modern and Holistic medicine" and in order to increase the duration of internship from 6 months to one year. Students also sought a stipend for the period of internship (much like MBBS students get), security of a government job and recognition of the course by the State Medical Council. This led to the change of the name for the final time and an increased duration of internship to one year.

The longest strike lasted one month in December 2006 with the main demands remaining the same, including recognition of the course by State Medical Council in order to practice allopathy.

All these agitations of students led to further delay of the annual exams and further derailed the course schedule. The legal and political issues along with the various strikes of the students also contributed towards the growing unpopularity of the course in the state, which led to far decreased numbers of applications especially for the entry of the final 2003 batch. The entry requirement of 75% percentage for the first batch dropped to 65% and 40% for the second and third year batches, respectively. There were also around 809 dropouts from the six institutes out of total 2200 admissions made.

Faced with this scenario, the new state government which anyway did not have to own the moral responsibility of this adventure, found it opportune to immediately stop any further admissions to the course. Managing three batches of students- a total of 1391 students was complex enough and it had no appetite for more. Thus on 1st September 2008, the course was officially ended. Attention now shifted to the question of what should be done with these 1391 students.

Table 2: Derailed Timeline for the Different Batches admitted to the 3-Year Course

	Admission	1st-Year Exam	2nd-Year Exam	3rd-Year Exam	Length of delay in completion
First Batch	Nov 2001	Mar 2003	Oct 2004	Jan 2006	1 year, 2 months
Second Batch	Nov 2002	Oct 2004	Dec 2005	Feb 2007	1 year, 3 months
Third Batch	Nov 2003	Mar 2005	Sep 2006	Oct 2007	11 months

Source: CCM, Raipur and corroborated in interview with students of different batches, 23 May 2009.

Iterating to a solution: The birth of the RMA

The May 2001 state Act created the CCM as the only deemed body to register the 3-year course graduates, which allowed the course to legally begin even though it was not recognized by MCI. The creation of CCM, however, did not facilitate the legal status of the graduates as practitioners

of allopathic medicine. Education is constitutionally in the Concurrent List (subjects shared between Centre and states). This implies that if there is a central Act already in existence, states cannot contradict the central Act without legal violation. As per the MCI Act (1956), MCI and state medical councils have the sole authority to allow the registered physicians to practice allopathy. With the Chhattisgarh State Medical Council having no role in the registration of the three year graduates, and with no likelihood of their being able to recognize this course, the students cannot legally, practice modern medicine. This became clearly stated in a Supreme Court (SC) Ruling of February 2003[3]. This particular ruling noted a precedent[4] when by virtue of such qualifications as prescribed in a State Act being registered *in a separate State Medical Register* with the State Medical Council a person was "entitled to practice allopathic medicine under Section 15(2)(b) of the 1956 [MCI] Act."[5] The CCM Act was a state act, but since this qualification was not registered with the state medical council, it could not confer the rights to practice allopathic medicine.

One response to this situation was to allow them to practice as paramedicals under the paramedical act. The paramedical act specifies that the paramedic could provide that medicine or that care which he or she was trained to provide- and this could have provided the cover needed. But the problem with this was that the graduates of the three year course aspired to be called doctors and medical professionals and would not settle for the term paramedicals or even alternative medicine. The government therefore had to define what they could be allowed to practice, which did not fall under the MCI Act but yet would be medical enough to manage this situation.

With the clarity that no legal independent practice in allopathic medicine was possible for these students, a bipartisan high powered committee was tasked to find a viable employment for these students. One suggestion that this committee considered was to revive the post of Assistant Medical Officer (AMO), an earlier posts which had been abolished in 1976. The post had been occupied by the three year Licensed Medical Practitioner (LMP) of West Bengal and the Registered Medical Practitioner (RMP) of Maharashtra. The proposal in Chhattisgarh was to create a third post of AMO in addition to the 2 MOs that had been already sanctioned per PHC. This proposal however was rejected by the Finance Department on grounds that such an increase in health personnel expenditure was not justifiable.[6] The next option considered was to post them as Block Extension Educators (BEE). This is a post financed by the central government and which has duties not only of health education but of assisting the block medical

[3] Supreme Court of India decision on *Subhashis Bakshi v.West Bengal Medical Council* (Civil Appeal No.152 of 1994)
[4] Cited as *Dr. Mukhtiar Chand v. State of Punjab*, (1998) 7 SCC 579.
[5] SC decision on *Subhashis Bakshi v.West Bengal Medical Council*, pp. 287-288.
[6] The process of sanctioning 2 MOs per PHC had already taken two years (2004-6) to get budgetary approval. Interview with Dr. D.K. Sen, 22 May 2009.

officer in management tasks. Being a centrally funded post, it would create no additional financial burden on the state exchequer. The post of the BEE, was higher than a field supervisor but immediately under the medical officer which would be a positioning in the hierarchy that would be acceptable. However this was rejected by the students who were not ready to accept any post without the word "medical" in it. And at any rate the center would fund only about 250 BEEs and many of the posts were not vacant.

The current decision is to appoint Rural Medical Assistants in leu of the second MO post which was kept in abeyance. The government thus saves half the salary of the second MO-Rs 8,000/- against Rs.15,000/-to MBBS doctor by this measure. The RMAs were sanctioned selectively in the PHCs classified as remote or tribal in districts with the most acute shortage of doctors. By the letter of the law they are not to be posted where there is no medical officer, for they are only assistants, and therefore they would not contravene the law. However in practice medical officers would not join in many PHCs and these RMAs may have to function independently which is acceptable. Already pharmacists and nurses and AYUSH doctors do the same. Government employment with medical functions thus becomes possible, but private independent practice by these graduates is still not permissible. The IMA finds this truce acceptable and so do the students who have got the title of 'medical' in their designation and government job- two key demands of theirs. The funds are from the central government through the NRHM mechanism and therefore the state finance department finds it easier to accept- though in the long run it would have to take this over.

Most important of all, over half of the State's 700 odd PHCs were languishing for the lack of a doctor and at one go, all of them are not having a doctor in place- even if legally he is an RMA, to the public he or she is a doctor!! The state has sanctioned two doctors per PHC in 2005 and this is in accordance with IPHS norms. It was barely able to fill the PHCs with even one doctor and was had used AYUSH doctors to fill in over 200 posts. Now with 1391 RMAs potentially available, most PHCs could be made functional. It seems to be a win-win situation all around, even if this solution was arrived at after a prolonged iterative process.

Recruitment of RMAs in rural postings.

There has been overwhelming positive response to recruitment of RMAs to the most rural and tribal PHC postings, where previously no trained physician existed; RMAs are stipulated to work under supervision of the first Medical Officer. However, this does not translate always into direct supervision as RMAs are present in PHCs where usually no other MO is willing to accept a posting.

RMAs in non-tribal areas are supposed to get an honorarium of Rs. 8000 per month (significantly less than the salary of a MBBS-trained doctor) and those in tribal areas are

appointed on honorarium of Rs. 9000 per month as per approved NRHM PIP. But the government had appointed them on uniform salary of Rs.8000 per month. Appointments are contractual and for a period of 2 years. In 2008, the CCM conducted the first round of interviews for 398 sanctioned posts of RMAs in the identified 12 with large tribal and remote rural areas. About 225 candidates were selected and posted. Preference was given to their native districts if that 'home district' was among the 11 districts selected for RMA postings. The scope of practice of RMAs is summarized in Box 1 and detailed in Appendix C below. The remaining 173 posts were re advertised in 2009 and 529 applications received and another 78 were recruited. About 303 out of 398 RMA posts are filled. The 95 posts of RMAs which were not filled fall under the SC/ST category. They remained vacant, not because of a dearth of interested applicants, but due to the absence of adequate numbers of SC/ST students ever trained in these institutes. The reservation rules at the time of admissions were either insufficient or poorly implemented. These first RMAs have been posted in the most remote and difficult areas of Chhattisgarh to provide health services.

Table 3: Postings of RMAs in First & Second Recruitment Drive

District	Sanctioned Posts	Positions filled during the First recruitment round in 2008	Positions filled during the Second recruitment round in Feb,2009	In Position	Vacant
Bijapur	13	3	5	8	5
Narayanpur	7	7		7	0
Jagadalpur	55	33	9	42	13
Jashpur	32	18	4	22	10
Surguja	77	54	1	55	22
Koriya	27	12	10	22	5
Kanker	28	12	15	27	1
Korba	31	29	2	31	0
Raigarh	47	31		31	16
Rajnandgaon	33	20	7	27	6
Dantewada	24	2	10	12	12
Kawardha	24	4	15	19	5
Total	**398**	**225**	**78**	**303**	**95**

Source: CCM, Raipur and SHRC, Raipur

In light of this positive experience of posting RMAs in underserved remote areas and existing 740 vacancies of Medical officer, the state has recently increased the total RMA posts to 858. With the policies of contractual appointments of MBBS doctors and recruitment of contractual AYUSH doctors at the post of MOs, only 1407 posts could be filled out of total MO posts of 2147. Therefore to make up the gap, in a recent order, the state government had introduced one RMA post at all PHCs and an additional post for Lady RMAs at CHC level in all the 18 districts

of Chhattisgarh irrespective of the difficult, rural or tribal status of the districts.[7] About 74 RMAs who had joined in the second round of recruitment also appeared in the third counseling seeking change of posting location. Thus 629 posts were filled through the counseling sessions conducted by CCM from 1st – 8th Oct, 2009. Thus of the total l sanctioned posts of 858 RMAs, 229 were recruited from earlier two rounds and 629 recruited after the third round. At the time of this documentation, those selected from the third round are joining. Even if all do not join, the historic nature of this achievement cannot be diminished. For the first time, probably since independence, a way has been found to fill up all these vacant posts.

Table 4 Postings of RMA after Third Recruitment Drive

S. No	District	Sanctioned Posts	In position (PHC)	In Position (CHC)	Vacant
1	Bijapur	17	14	3	0
2	Narayanpur	9	7	2	0
3	Jagadalpur	67	58	9	0
4	Jashpur	38	31	7	0
5	Surguja	98	81	17	0
6	Koriya	31	28	3	0
7	Kanker	38	34	4	0
8	Korba	41	37	4	0
9	Raigarh	57	50	7	0
10	Rajnandgaon	51	47	4	0
11	Dantewada	30	28	2	0
12	Kawardha	26	22	4	0
13	Bilaspur	84	74	10	0
14	Dhamatari	26	23	3	0
15	Durg	86	72	14	0
16	Janjgir Champa	48	39	9	0
17	Mahasamund	30	26	4	0
18	Raipur	81	63	18	0
	Total	**858**	**734**	**124**	**0**

Source: CCM, Raipur and SHRC, Raipur

Differences between the 3-year course and MBBS graduates: In Training and Aspirations:

The 3 year diploma course was justified as an effort to prepare skilled health care providers for the underserved areas. Locations of the six institutes were selected to be in rural areas. Unlike for MBBS graduates, the one year of internship for these three year students has a significant exposure to rural public health system with 1 month of training at Sub-Health Centre, 3 months

[7] Interview with Chhattisgarh Health Minister, Shri Amar Agrawal, Raipur, 22 May 2009. The Minister expressed a vision of recruiting all the current 1391 graduates from the 3-year courses in the coming years and hoped that their successful posting in such remote and tribal areas would provide the necessary evidence to restart such a course at some later date.

at PHC, 4 months at Community Health Centre (CHC) and 4 months at District Hospital (DH). At the DH, there are rotational postings in the departments of Surgery, Medicine, Obs & Gyn, as well as orthopedics and pediatrics for 20 days each and for 10 days each in the Orthopedics, ENT, Ophthalmology and Casualty departments. This gives to the students, field-based learning of the public health systems and enables them to develop skills to provide health care services even with limited availability of equipments and facilities. The MBBS graduates, on the other hand, are taught in urban settings focused around a tertiary care hospital. Their rural posting is often in their own outreach center, which is not a sufficient exposure to the public health system. They have tended to therefore develop an urban orientation and preference to practice in a tertiary care n set up, rather than in rural areas.

It is also significant that in our focal group discussions and interview, the 3-year course students expressed their role models to be doctors working in the PHC, CHC or DH where as for MBBS students the role models have most usually been their professors in medical colleges.[8] It has been well documented that the vast majority of MBBS graduates aspire almost singularly on further specialization through post-graduate studies. Although the curriculum for the 3-year course and MBBS are similar, it is still the graduates from the 3-year course who are more likely to serve in rural and tribal areas, as compared to MBBS graduates. This difference in the aspirations of students is attributed mainly to the design and pattern of the courses.

In terms of performance the difference between MBBS and the three year doctors is being studied using the sample of the first 50 RMAs who have joined public service.

Box 1: Scope of the Rural Medical Assistants (RMAs)

- Assist in implementation of all National and state level health programs
- In case of any emergency situation, RMAs have to provide primary health care services and then refer the patients to higher level of public hospitals based on the requirement.
- Provide preventive health education and measures to attain good health.
- Provide limited primary level treatment for some of the conditions.
- Provide basic maternal and child health care, conduction of Delivery, Basic management of complications of pregnancy and childbirth, Suturing of first degree Perineal tears.
- Perform simple operative procedures - repair of small wounds by stitching, drainage of abscess; burn dressing, applications of splints in fracture cases, application of tourniquet in case of severe bleeding wound in a limb injury
- Provide primary level treatment for 5 – 7 days only if the improvement is visible in the health of the patient else they should refer the patient to the nearby CHC for further treatment.
- Permission from the High Court and Supreme Court to dispense certain *Over The Counter (OTC) Drugs*
- Linkages with communities to increase the service delivery.
- Regular meeting with the peripheral staff.
- Follow up in treatment diseases initiated by Medical Officers of CHC and PHC
- Follow up of all National Health Programs in Coordination with the BMO.

[8] Discussions with a group of 30 graduates from the three year course.

Lessons from the Case:

The 3-year course was a response to a major crisis in human resources for health that the newly formed state of Chhattisgarh faced. The state responded to this crisis in multiple ways- and it is interesting to look back now on what was tried and what was not tried and why this was so and what were the outcomes of different efforts.

One effort was to open up new medical colleges. Two colleges have been successfully opened and two more including a centrally sponsored one is planned.
The other was nursing schools and ANMs schools. These two have opened up and though less in numbers and slower to start off than could be asked for they are progressing well.
A third was the Mitanin programme, a community health volunteer programme of a woman health activist in every hamlet that is doing relatively well. It has survived and grown and it is exploring new directions of growth.
A fourth, very little discussed and even less documented is a major effort to train village RMPs, or quacks in less polite usage, to provide rural care. These informal medical practitioners had only to be nominated by the panchayat and sent to the district hospital, where they would then get a six month training and a certificate and then be sent back. About 1100 persons were so trained and state considered providing two of them with government employment in each panchayat and then gave it up, preferring them to be market driven. This by all reports failed to make any impact and has disappeared from public consciousness, but is worth digging up, if not for anything, at least to not repeat it.
The fifth bold experiment and the most curious of the lot is this three year course. It ran three years and then stopped by the government, but in a final spin seems to have come up as a winner with fresh possibilities.

Some officials interviewed for this study have suggested that the entire problems are due to the speed with which initial implementation of the 3-year course occurred. It did not allow time for substantial consideration of the various aspects which were later noted as weaknesses. Such a reading is only partially true for even the haste was part of the design. A better analysis of what happened and the lessons therein would be from a stakeholder analysis. Each stakeholder had a differing programme theory- a different interpretation of the context, of the objective, of the way various mechanisms were supposed to work and the outcomes these mechanisms would deliver. There were also many different expectations of the programme. Let us reconstruct these programme theories.

One is the programme theory of the political party in power at the time of starting the course, and with it of the administration, represented then by the OSD, who was willing to implement then the political mandate. To them the expansion of medical education was the fundamental political achievement- and the political and social good will they would gain from such an expansion. Access to medical education is one of the most powerful vehicles for upward social mobility, and for a political middle class coming into its own with the creation of a new state this was all the more important. This had to happen in the here and now and in large enough and dispersed enough measure to secure the good will in time for political mileage and social recognition.

Medical college expansion would be too slow and too cumbersome and affect too few. If a large number of graduates are thrown into the market and they are less competitively placed as compared to 5 year doctors, they would have to gravitate to the rural areas and thereby the rural shortage of doctors would be achieved. The main barrier to this is the restrictions imposed by the medical council, which have to be legally and administratively circumvented and haste is part of the process of doing so. To the students one has to promise a regular medical education, for that is the main attraction of the course, but simultaneously to the legal front one has to project it as alternative medicine.

Is this an unfair portrayal? Were not the architects of this programme serious about the rural human resource gap and trying to address it- primarily. Certain reasons that question this are the following: there were no plans explicitly made for public sector employment. There were no standards strictly followed- for faculty and for students and for clinical teaching as CCM failed to monitor the set standards. The rules of admission allowed for NRI seats and management quotas. All the education was positioned in the private sector and none of the parties had much experience of running any such institution. All of these indicate a lack of seriousness about the course as a vehicle of creating doctors specially tuned to work in rural areas. We must also remember one aspect about this context. The government was also trying similar experiments in the entire educational field. Over 125 universities – all private had been sanctioned under another hastily planned state law and most of these had to be closed once the new government came to power. Many of them had no buildings or faculty- but were sanctioned. Permission to start up professional colleges and universities were one of the important forms of rent seeking in those days and could have acted as a driver. Note especially the capitulation of more and more functions to the organization of these institutions and to the hasty increase of students and the picture is complete.

Now consider another programme theory of the medical professional and their institutions. In this understanding the three year course is nothing but a political stunt that would provide under-qualified medical professionals who would compete on the market with fully qualified professionals. Though in theory 5 year medical professionals would be able to command the market because of better knowledge and skills and because of higher status, in practice, given information asymmetry, patients cannot be trusted to make the correct choice. The likelihood of these three year doctors working in remote areas is remote. Also even if they do, they are less likely to be effective and more likely to make dangerous mistakes than their five year counterparts. As the programme rolls out, and the three year graduates fight to be called doctors, and the government fails to post them into remote areas, their fears seem genuine.

Now to consider the students. Many of them saw the course as an opportunity for upward social mobility into the social and economic privileges of being called a doctor. They possibly knew that the course was unrecognized and the government job was uncertain but counted on their collective and individual political influence to swing these two dimensions. The moment this seemed less likely applicants to the course dropped sharply and it may be that those who still apply have either a different motivation or are more determined to somehow make it into the medical ranks. If they find that there is no career progression from RMAs and cannot return to the city, and they are stuck there some of them may settle for this, but most would return to their

dissatisfied status. Their acceptance of the current compromise may just represent a pragmatic judgment that given the forces at work, they should first secure these two gains, the medical word in their title and the government job for some more time, before they take up the struggle again.

Now consider another programme theory- one that is current in NRHM circles and also the way that some of the other architects of the course conceived it. We present this with some elaboration, given the wisdom of hindsight. That is to plan this only as an approach to putting in place physician skills at the primary health center – especially in remote and rural areas. If this indeed be the aim the following corollaries would follow:

a. Allow only public sector institutions to teach this course or at least ensure that all seats are merit based. There is no role for capitation fee paid management quota, much less NRI quota. If the institutions are private run, the government may consider paying the institution for every student who turns out and joins government service. If students have to pay a high tuition fee for admission that it would tend to select students who are well off seeking upward political mobility.
b. Allow only as many seats as are needed for filling vacancies in public sector. No role or space is provided for private practice. This in itself is a powerful way of ensuring that these candidates staying in the rural posting. Inform students and select students by their clear willingness to work as RMAs. This would need an interview- counseling process that makes this clear. Do not offer them the option of going into private practice as doctors or working in urban areas. This will lessen the candidates who would apply and make it unattractive for anyone to pay capitation fees, which in turn would make it unattractive for private sector. The government would need to live with this logic. The entrance examination may be used, but with all its risks, an aptitude and attitude assessment in the interview would help select students for rural areas better.
c. Reassure the medical professional that this sector is not going to compete with them in the urban market. If doctors are willing to stay in rural areas, this would be unnecessary, but till then this is needed.
d. To satisfy in part the aspirations of the political leadership and politically active groups and the students do offer an up gradation to a regular MBBS after 5 to 10 years of service with a bond to serve another 5 years.
e. Set down standards for admission, for number of faculty and for certification.
f. Define the syllabus carefully, so that it is practice oriented.
g. Choose the institutions to conduct this course carefully. With profit motive ruled out, few would apply and whether government should take it up or find not for profit institutions who would.
h. Accredit under the paramedical act, with modifications if needed and ensure that the upgradation course is recognized by the Medical council of India before it is begun.
i. Build up an institutional mechanism at state and district level to design and implement this course.

The Way Forward:

At the time of writing this case study, the political- administrator position is modified to see this model as offering a way forward to solve the problem of retention in rural areas. This is because of four factors- graduates have accepted this arrangement, PHCs vacancies have been greatly reduced , preliminary reports show patient and public satisfaction with the arrangement, and finally the professional resistance to this arrangement is muted, if not altogether absent. An evaluation is ongoing to test whether the professional skills they have and use is comparable with other alternatives and to formulate strategies of improving this. The preliminary reports are positive and the clinical gaps appear remediable in-service.

Currently the Ministry of Health is also thinking of upgrading the Health Sub-centers to an independent, fully functional curative care unit in addition to the hither to preventive and health promotive roles like the one being implemented in China. In this context, RMAs are the best option to be placed in such Health Sub Centers in addition to the ANMs considering the cost factor and availability of such human resource in remote areas.

When the Urban Health Mission is rolled out, there will be shortage of qualified medical personnel to man the Urban Health Centers providing better curative services than the unqualified practitioners normally the urban poor and the slum dwellers resort to. Here the three year course graduates may also prove to be a good option.

There are thus calls to re-start the course. Assam has also started up a similar programme, and this reinforces a trend. This case study is meant to remind ourselves of the history of how it worked, so that we learn from the past. There could be a trend to just declare it is working and go back to an unregulated, hasty market based education model. Only this time it would not be as easy to absorb the graduates in the public health sector as earlier. Moreover both legal and professional resistance would be more, for it would not be able to tell the courts or the profession that this is about alternative medicine, and not allopathic medicine. Students also, given the past experience of a successful agitation would be more persistent. There is a potentially useful role to play for this three year course, but only if it is highly focused as a strategy of providing access to professional skills in rural and remote areas, and it consciously shies off from other stated and unstated objectives. The conditions by which this focus on rural retention is maintained, does not lie in only its three year nature, it lies also on which sort of students are selected for the course, the number of students who are selected for the course, who conducts the course, how the syllabus is oriented, and whether at all the graduates are allowed to do private practice in urban areas, or for that matter anywhere, and if not how they would be restricted.
There is nothing wrong with imposing such restrictions- indeed that is precisely what would make it acceptable to all stakeholders. World over creating professional skill sets that have limited acceptability in private markets and in international migration, and are by policy kept off public markets, has been an useful device to make professional skills available where they are needed. But for this to work, the other policy corollaries have to be part of an essential package- with some good on the job support and training too, if we need health outcomes in addition to user satisfaction. Also a career path that provides for long term sustainability of the option. Thus we need a professionally competent long term plan- not one designed for the immediate alone.

Chhattisgarh has been able to achieve a set of immediate objectives through a process of iteration, including the cancellation of errors, some hard negotiation and some good luck. Despite this, the sheer historic scale of this public health achievement should not be lost on us. For the first time, perhaps since Independence , it has been possible to post a person with medical skills in all the PHCs of this region. However this Chhattisgarh's past approach to generating RMAs cannot be the basis of policy for re-starting the three year medical course in Chhattisgarh or the terms of its replication. The three year course could be re-started, and other states can consider its replication, only after a policy decision on all these aspects is taken and the support mechanisms needed to sustain this process are put in place.

Appendices

Appendix A

Time line	Events
2000	Committee of 3 members – Professors of Medical college – Design of 3 yr diploma course was proposed
January 2001	Proposal of 3 year diploma medical course
February 2001	Proposal for formation of Chhatisgarh Chikitsa mandal
2nd March 2001	Refusal of MCI to recognize the course
2nd March 2001	Approval for the CCM from Law
2nd March 2001	Approval from Finance department
2nd March 2001	Nomination of 3 members of the CCM – President – DHS, Vice President – Dean Medical Colleges, Registrar – 1 Nominated Gazetted officer
3rd March 2001	Formation of a Committee with DHS, DME and Senior Secretaries as members
27th March 2001	Meeting of Chief Secretary, Addditional Chief secretary, Principal Secretary, Secretary GAD, Principal Secretary Law, Secretary Health
29th March 2001	Approval of the proposal
17th April 2001	Proposal approved in the Cabinet meeting and the Name of the course – Diploma in Modern Medicine and surgery
16th May 2001	Proposal approved and signed by Governor
18th May 2001	Formation of CCM and Gazette notification printed
22nd May 2001	Minimum standard guidelines for Private colleges prepared and EOI floated
31st may 2001	IMA Bilaspur filed a petition against the course at Bilaspur High Court
24th August 2001	Name of the course changed to Diploma in Alternative Medicine , Chhattisgarh Chikitsa Mandal act – amended
29th August 2001	Gazette Notification with new the name of Diploma in Alternative Medicine
September 2001	Inspection of colleges by inspection committee – DHS, Joint DHS, 1 CMOH nominated by Govt. , Registrar CCM, District CMOH
2nd Oct 2001	3 colleges – Jagdalpur, Ambikapur , Pendraroad were inaugurated by CM.

Appendix B

Institutes	Total Students
Balgangadhar Tilak Institute, Jagdalpur	308
Anusha Memorial Medical Institute, Pendra road, Bilaspur	264
Ma Bambleshwari Medical Institute, Kwardha	229
Mahrishi Ashtang Medical Institute, Sarguja	210
Biken Institute of Medical Science, Kanker	200
Shri Kedarnath Institute of Medical Science, Katghora, Korba	180
Total	**1391**

Source: CCM, Raipur and SHRC, Raipur

Appendix C

DISEASE THAT CAN BE TREATED BY A RURAL MEDICAL ASSISTANT

DISEASES TO BE TREATED BY A RURAL MEDICAL ASSISTANT

Acute bacterial infections, febrile illness, diarrhoea, dysentery, viral infections, malaria, amoebiasis, giardiasis, worm infestations, gastroenteritis, cholera, typhoid fever, vitamin deficiencies, iron deficiency anaemia, malnutrition, upper respiratory infections, acute bronchitis, bronchial asthma (status Asthamaticus), first aid in ischemic heart disease, peptic ulcer, acute gastritis, viral hepatitis, urinary tract infection, common skin infections, , scabies, first aid in trauma, and animal bite.

In children treatment before convulsion, measles, chicken pox, asthma(status Asthamaticus), scabies and other common skin infections.

Care in pregnancy, child birth and post natal period, family welfare activities.

Follow up in treatment diseases initiated by Medical Officers of CHC and PHC.

OPERATIVE PROCEDURES PERMITTED TO BE CARRIED OUT A RURAL MEDICAL ASSISTANT

Repair of small wounds by stitching, drainage of abscess; burn dressing, applications of splints in fracture cases, application of tourniquet in case of severe bleeding wound in a limb injury.

Conduction of Delivery , Basic management of complications of pregnancy and childbirth, Suturing of Ist degree Perineal tears.

Follow up of all National Health Programmes in Coordination with the BMO.

DRUGS THAT CAN BE PRESCRIBED BY A RURAL MEDICAL ASSISTANT

Antacids, H2 receptors blockers, proton pump inhibitors, Antihistaminic,

Antibiotics- cotrimaxazole, trimethioprim, norfloxacin, quinolones, tetracycline, gentamycin, cephalosporin, erythromycin, nitrofuratoin, metronidazole, tinidazole. Ampicillin

DID Antitubercular- INH, rifampicin, ethambutol, pyrazinamide, Anithelminthics- mebendazole, albendazole

Antimalerials- chloroquine, quinine, primaquine, sulfadoxine- pyrimethamide,

Antileprosy- dapsone , rifampicin, colfazimine

Antiamoebic- metronidazole, tinidazole, dooloxanide furoate

Antiscabies- benzyle-benzoate, gama benzene hexachloride

Topical antifungal

Antiviral

Antocholenergic- Dicyclomine

Antiemetics

Antipyretics and analgesics

Laxatives

Oral rehydration solutions

Hematinics and vitamins

Bronchodilators- Salbutamol, theophyline, aminophyline

Expectorants

Oral Contraceptives

Gentian violet 1% solutions

Miconazole 1% cream
Vitamin A liquid
Vitamin B complex
Folic Acid tab
Xylocaine local
Methylergometrine tablets
Mehylergometrne- injections (For PPH)

IMPORTANT

- Certain Emergency drugs can be given before Referral
- Referral of all sick patients after initial management.
- Linkages with communities to increase the service delivery.
- Regular meeting with the peripheral staff.

PROCEDURES NOT TO BE PERFORMED BY A RURAL MEDICAL ASSISTANT

- **Medicolegal Cases**
- **Postmortum**