GPs, Integrated Primary Care (IPC) and Hospitals

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Executive summary:
This paper describes the advantages which can flow to the NSW hospital system and to patient care from closer involvement with GPs through integration of primary care sevices. The issues and barriers to this are also addressed.

The paper recognises that the failure to do this is one cause of Australia's high use of hospitals by international standards.

Whilst the paper primarily reflects the urban situation, many of the principles are relevant to rural settings.

The paper identifies the stratas of GP care – acute, acute on chronic and chronic and discusses the biases which exist between these strata in the present GP financing system and the resultant consequences for hospitals.

The point is made that while GPs can influence hospital ED attendances, the much more important influence which GPs can exert is on inpatient admissions for chronic illness. However the present GP culture, funding and inefficient access to support services mitigates against this. Nevertheless the ageing of our population demands that this problem be addressed.

An important area of discussion is the need for a multidisciplinary approach to chronic care involving GPs and health service personnel – a relationship which needs to discard the traditional separate systems with their 'referral and intake' processes. This must be discarded in community health services at least for the front line personnel such as primary health nurses (PHNs). Paper after paper note that 'GPs need to be involved' – but the papers fail to describe how that can be made to happen in an effective manner. This paper describes how this can be achieved.

The relevance of the necessary changes applying to acute, acute on chronic and chronic care are discussed. Changes are also noted to be required in health promotion, primary and secondary prevention.

The paper also discusses the relevance of the bulk billing debate to the hospital situation as well as the relevance of ambulatory care and GP after hours services.

An integrated primary care model is presented as well as the ways in which such a model can improve patient care, reduce hospital workloads and enhance GP lifestyle and profitability. The situation is thus 'win/win/win.'

Overseas experience in IPC is cited

The paper notes that the likely GP take-up of IPC will not be universal. With the right incentives, numbers of GPs, particularly younger graduates and female GPs will be attracted to practice from larger integrated centres while others will adopt the second best, networking model. Many, particularly older GPs will not change their practice culture.

Having identified the objectives, the issues and barriers, the paper proposes solutions.

1. Introduction :

It is recognised that the major impact that integrated primary care can have on the health system is in urban areas and accordingly this paper addresses mainly the urban situation. Many of the points made are nevertheless relevant to rural areas.

Whilst country GPs usually have affinity with their local hospital, this is not usually the situation in urban areas. The First response by urban GPs when confronted with problems in the hospital system is likely to be 'why should GPs worry ... hospitals are there to serve GPs and their patients'. GP interest in the hospitals tends to focus on the issue of getting patients into hospital.

This is a very shortsighted view. Australia overuses hospitals compared with comparable countries, at least partly if not principally due to our failure to organise alternative programs. This means GPs need to recognise that government must and will respond, and GPs should ensure their place in the resultant changes to the health system. It is also short sighted from the viewpoint that the more money that has to be pumped into the hospital system, the less there is available for other parts of the system, including GPs.

Examination of the latest OECD figures on hospital usage appears to support the view of a high use of beds in Australia. However there is no point in quoting the figures because the supporting definitional material shows a wide variation in the way beds are counted in the different countries, particularly in relation to nursing homes. The best acceptable comparative data is from the Australian Institute of Health & Welfare. Regrettably this is only up to 1995. Also a matter of regret is that New Zealand data is not available after 1991 and is not therefore included.

The AIHW figures for 1995 in respect of all acute care beds per thousand population are:-

United Kingdom	2.0
United States	3.4
Australia	4.0

It is believed that these figures have reduced substantially since then particularly in the case of the United States.

However irrespective of the comparative data, there is clearly large scope for better managing chronic illness to reduce hospitalisation in Australia.

2. Objectives:

To provide better care.
To reduce the pressure on hospital EDs for acute care and on in-patient services for chronic care.
To achieve this objective in the climate of a shortage of GPs in many areas.
To assist GPs to meet patient needs and resultant workloads.

3. Background issues:

3.1 Broadly, GP treatment can be divided into three stratas.

- Acute episodic care.
- Acute on chronic episodic care.
- Continuing routine chronic care.

Present GP funding encourages the first and to a lesser extent the second.

The NSW Chronic and Complex Care Program (CCC Program) currently mainly addresses the second strata – reducing the 'frequent attenders' cycling through the hospital system.

There is an increasing recognition that the big dividends in reducing hospital admissions lie in 'going upstream' - to intervene in chronic illness before these people reach the frequent attender stage. 'Going upstream' is in fact secondary prevention. As explained later in this paper in relation to primary prevention, secondary prevention will best happen if GPs are supported by various professionals who are trained in the required disciplines. This includes practice nurses (PNs); primary health nurses (PHNs); specialist education and liason nurses in diabetes, heart failure, asthma, COPD, mental health etc.

As explained later in this paper, GPs have limited skills and time for much of this work.

Interestingly the same can be said of practice management.

In addition to the obvious inclusions such as diabetes, asthma, heart failure etc., chronic care should also include antenatal care, Indigenous care, drug and alcohol, mental health care etc.

Sibbald B [1] reported that chronic care is best provided by a multidisciplinary team. Regretably, Australian GPs and funding arrangements are only starting to recognise this.

3.2 Chronic care is likely to increasingly involve the use of data base monitoring.

Harris M et al [2] showed there is evidence that the use of a data base provides better

care in diabetes and a multidisciplinary approach.

It is anticipated that the same will apply to other areas of chronic care. (eg CV conditions, asthma etc.).

Greenhalgh and Griffin [3,4] reported seperately that effective chronic disease care in general practice is best achieved if the system includes a register, protected time for chronic disease management, a practice nurse with some chronic disease experience, a written management and education protocol agreed with the local consultant specialists, and a system for auditing standards of care. Unstructured care is associated with worse metabolic control and greater mortality than structured care. Recall, with prompting for patients and their GPs, can achieve standards of care as good as or better than hospital outpatient care.

3.3 There are a range of GP practice issues affecting chronic care by GPs.

- Busy GPs can struggle to find the time for chronic care.
- Chronic care is more intellectually demanding and involves more paper work, data base work, working with other professionals, and home visiting etc.
- Chronic care is less financially rewarding.
- Chronic care probably only represents 10-15% of an average practice.
- There is a real shortage of GPs in many areas. This is likely to continue or even worsen, given the number of GPs currently being trained.
- Whilst the need for chronic care is recognised, the demands of acute care tend to take precedence when a practice is under pressure. (eg. In winter).

The present bulk billing debate is also relevant. (see later in this paper).

3.4 The ageing population will demand more multi-disciplinary chronic care.

3.5 There have been successful experiments in co-locating PHNs in larger general practices in the SWSAHS Area. These were however mainly related to medical-social activity.

3.6 GPs are realising that to effectively use the new EPC Medicare Benefits targeting chronic care, they need more support at the practice level.

Blakeman et al [5] reported that research involving GPs in South West Sydney showed that time, organization and educational issues remain barriers to uptake of EPC care. GPs in this research expressed support for a number of strategies to overcome these barriers. These included having other health professionals come to their practices; giving Divisions of General Practice responsibility for creating structures for care planning and case conferencing; increasing knowledge and enthusiasm among allied health professionals for the use of the items; improving GP access to community and allied health services and employing liaison officers to assist.

Many of these strategies could be addressed by having GPs working in collaboration with community and allied health services in an Integrated Primary Care Centre.

Newland J [6] reported that the evaluation of the implementation of EPC in NSW showed lack of time and resources were a major barrier to the implementation of the EPC Program.

3.7 Macarthur Health Service with the assistance of Macarthur Division of General Practice operates a dispersed networking model of primary care with PHNs seeking to network with designated GPs. This has had limited success so far, with some GPs being reluctant or unable to be involved.

The Division, in concert with the Health Service is adopting a policy of concentrating IPC activity in those practices which indicate they wish to participate in this activity. It anticipated that this will provide demonstration models for a networking model of IPC.

3.8 IPC designed to reduce the load on hospitals, must not draw resources away from hospitals. The creation of IPC must take place by making better use of existing extra hospital resources wherever possible.

3.9 Primary prevention and health promotion:
GPs are constantly being called on to provide more services. These services frequently involve skills in which GPs are not adequately trained nor have the time to deliver. The obvious example is diabetes education where GPs cannot match the skills of a trained educator. The same applies to a range of other education activities such as heart failure etc. However the most notable example is probably health promotion and primary prevention. To be effective, this requires special knowledge, special skills and physical resources. Above all it requires time availability which a busy GP, particularly in an undersupplied area who is flat out coping with the workload presenting through the door is likely to simply not have.

Like other aspects of population health in a GP setting, primary prevention and health promotion requires resourcing and funding otherwise they will not happen. It is argued that this is a reason for providing these services separately. This is a bad argument in that GP practices provide the best possible catchment for primary care clients. For this reason the obvious answer is to provide these services by integrated care at the GP practice level.

4. How GPs can provide better chronic care and reduce hospitalisation.

4.1 There is abundant overseas and emerging local evidence that GPs can provide better chronic care if they are assisted by PNs and other support personnel as described later in this paper.

4.2 The ways in which GPs can play a stronger role in hospitalisation reduction needs to be developed. GPs obviously play a key role in both ED attendances, hospital admissions and lengths of stay.

GPs can reduce ED attendances by:

- Being accessible at in-hours times.
- Ensuring the provision of after hours services. (see later in this paper).
- Working with other care providers such as specialist nurses to provide better acute on chronic care.

GPs can reduce in-patient admissions by providing better chronic care through integrated primary care.

GPs can also reduce admissions and lengths of stay through assisting ambulatory care programs. (see later in this paper).

5. Ambulatory Care:

A structured ambulatory care program can significantly reduce acute hospital admissions and lengths of stay. The Victorians are claiming a 7% reduction in acute admissions as a result of their Ambulatory Care programs. The highly successful Macarthur Program is claiming a 14% reduction at this time and believes that with close involvement with GPs this can be pushed to 20%.

The Wingecarribee Health Service Transitional Care Program (ambulatory care program) uses GPs as the principle medical workforce. This program has provided a major reduction in hospital admissions and lengths of stay.

6. Overseas experiences:

6.1 A GP in Bowral recently returned from six years in the UK has provided the following commentary on what appears to be a typical UK model of primary care.

- The practice varied from four to five GPs and yet easily provided services to 10,000 people. The initial Australian response to this was to wonder how this number of GPs coped with that patient load. The answer was that they had multidisciplinary support, particularly for chronic care. They had practice nurses and health visitors (equivalent of PHNs). The GPs and the nurses would agree a care plan with the nurses doing most of the chronic care follow up work within guidelines, with the GPs coming back into the picture when there was a problem or for routine review.
- There were three 'senior' GPs who did most of the chronic care work and one or two junior GPs who did most of the acute work. However the senior GPs usually also handled the acute care needs of the chronic care patients.
- The GP commented that Australian GPs use hospitals much more than UK doctors.

Strong anecdotal evidence suggests that more than 70% of GPs in the Greater London area are now co-located in IPC models of practice.

6.2 IPC has been the model of primary care delivery in US HMOs for thirty years or more and while some aspects of US HMO practice are controversial, this aspect is excellent.

6.3 New Zealand has moved towards IPC on a large scale.

7. What is the lesson in this for Australian GPs?

Australian GPs need to recognise that other professionals have their routine work done by others (architects / draughtsman, solicitors / law clerks etc.).

Australian GPs need to see that their workload can be reduced through teamwork and that this will improve their life style.

8. The bulk billing debate:

Hopefully the outcome of this debate will ensure:

- Equity of access to services on a non stigmatising basis for all Australians.
- A reduction in hospital bed block through better community based chronic care.

To achieve this outcome, the debate must recognise and address the relevant issues.

Firstly the GP environment has changed significantly between 1983 and 2003. There was an oversupply of GPs in 1983 – there is an undersupply now. This has resulted in GPs in areas of GP undersupply controlling their workload by the use of patient co-payments to discourage trivial attendances. Other changes include the needs of the ageing population; more sophisticated chronic care methods (read more time consuming); more technology; increased patient expectations etc.

Practice economic considerations are thereore frequently only one reason for declining bulk billing rates. Unfortunately the use of co-payments to discourage trivial attendances can also discourage non trivial attendances

To seek to increase bulk billing through untargetted increases in GP attendance benefits is likely to be counter productive to social goals for two reasons:

- GPs using co-payments to control their workload are likely to add their co-payment on top of the new Benefits.
- High attendance benefits are likely to exacerbate the present bias in favour of acute care as against chronic care and thus further increase hospital chronic care loads.

For these reasons, whilst there is an undoubted need to increase GP funding, the increase needs to be targetted.

The argument that a reduction in bulk billing impacts hospital ED workloads is understandable. However the situation appears to be more complicated than at first sight. Whilst lack of bulk billing undoubtedly causes increased ED

attendances, it would seem that the more serious problem in the EDs is bed block which is affected by chronic care admissions.

Dr Ian Knox from the College of Emergency Medicine [7] reported that bed block rather than primary care attendances is the main problem in EDs

Quite apart from this view however, primary care attendances at EDs are undesirable in any case. EDs are not in general intended to deliver primary care. Having said that, there is however an argument for some form of shared care ED / GP role in primary care in the quiet hours. This is discussed in relation to after hours services later in this paper.

9. Solutions:

Whilst this paper addresses the impact GPs can have in relation to assisting the hospital situation, it is argued that the following solutions also address the current general situation in relation to GP services.

9.1 Acute care and EDs:

Despite the opinion of emergency medicine specialists in regard to primary care attendances at EDs, reduced bulk billing is undoubtedly an issue for EDs and the sutuation needs to be addressed. However the social equity/access issue is probably more important. The suggested solutions are as follows.

i). Encourage the Commonwealth to provide an incentive to ensure that at least Health Care Card holders are bulk billed. It is recognised that this is likely to be politically sensitive. However it may be the best solution in the short term until such time as GP numbers are increased. This recognises the fact that the present decline in universal bulk billing is in part due to GP shortage.

The incentive for this must be adequate to ensure a high level of acceptance by GPs. Regretably in areas of GP undersupply while this measure will increase the bulk billing rate, co-payments are nevertheless likely to continue as a means of controlling workload.

ii). Encourage the Commonwealth to provide a significant increase in attendance benefits combined with an even more substantial increase in chronic care benefits plus more widespread funding of practice nurses. This is the targetted approach needed to ensure a proper balance between acute and chronic care funding.

This would result in higher levels of universal bulk billing in areas of adequate or oversupply of GPs. In undersupply areas it is confidently expected to lead to an increase in bulk billing at least for Health Care card carriers and for people who fall just outside the Card net.

Whilst this measure raises the 'two tired' concept, it is pointed out that hopefully it will disappear when the supply of GPs becomes adequate again. Also, it is

pointed out that a two tiered situation has existed for many years in relation to the Pharmaceutical Benefits Scheme and in government operated public transport.

iii). Encourage the Commonwealth to maintain and further enhance the incentives to increase GP numbers in areas of GP undersupply. Regretably this will take time and in the meantime a two tiered situation is probably inevitable in these areas.

9.2 Acute on chronic and chronic care:

i). GP funding:

Seek to ensure that Medicare Benefits for chronic care services are adequate to ensure that the existing funding bias towards high volume short consultations is addressed and that GPs are thus encouraged to provide chronic care.

ii). Integrated primary care centres (IPC centres):

Create a small number of demonstration model IPC centres to show GPs and health service personnel the way in which these centres should be structured and operated. These demonstration centres could be developed using existing health centres or existing GP premises.

It is recognised that government cannot fund a widescale operational network of such centres. This is not necessary in any case. Operational centres could largely utilise existing facilities with modification where necessary. This process would have to be privately financed. However as in the UK and New Zealand, some government support / incentives will probably be necessary to foster this process. This may take the form of a resumption of the previous Practice Amalgamation Program. This is relevant because IPC will work much better in larger more efficient practices.

IPC centres should follow the model described later in this paper.

9,3 After hours services:

It is not productive to continue calling for GPs to provide after hours services from a practice base. This is becoming increasingly the case given the rising proportion of female GPs and the security issue. The latter applies to both house calls and opening up surgeries at night. Also, it is unreasonable given the ageing of the GP workforce and the modern lifestyle expectations of younger GPs to expect GPs to get out of bed at night and still be expected to perform high medico legal risk practice the next day.

In any case the traditional model of GP after hours services is not meeting modern needs. However the ageing population need in particular is requiring services at all hours.

It is argued on the basis of pilot model GP after hours services at Maitland and Campbelltown that the answer lies in:

- A GP clinic located at public hospitals, related to, but not in EDs.
- Arrangements being made for some form of shared care between the GP service and the EDs in the quiet hours when there is no justification for both services to operate.
- An after hours telephone triage and advice service to meet the needs of the GPs, the ED and ambulatory care services.
- A taxi voucher system to assist people to attend the GP clinic or shared care service where they cannot otherwise travel.
- Lastly, recognition that in some instances the Ambulance service will have to be used.

It has been shown, particularly in the larger scale pilot at Maitland that the above measures have met the needs.

10. Suggested models for IPC:

10.1 General:

GPs need three strata of support personnel to practice IPC.

- These are a first tier of practice nurses (PNs),

- The second tier comprise mainly specialist nurses including primary health nurses (PHNs); chronic care educators and liason nurses in diabetes, asthma, heart failure, mental health. These workers should regularly visit IPC centres to support the PNs and see relevant patients. Another important group of second tier practice visitors are health promotion workers.

- The third tier comprise a wide range of mainly allied health personnel who would work mainly by conventional referral.

One of the barriers to IPC remains the concept of 'referral and intake' for access by GPs to community health services. This denotes a separate system which is contrary to integration. Referral is however nevertheless probably appropriate for the third tier above.

i). Practice nurses (PNs):

Practice nurses assist GPs in the general practice setting. These nurses are normally employed by the practices. In the case of urban practices, they are currently funded by the practice and by the Commonwealth in the case of rural practices.

Campbell Research and Consulting[8] reported that 36% of practices employ nursing staff (85% of whom were registered nurses). A number of divisions of general practice have also employed nurses to work with practices to support care planning and case conferencing. This has occurred in the context of the coordinated care trials and a number of Divisions are providing nurses to undertake elements of EPC health assessments for GPs on a cost recovery basis.

A long standing project has existed in Eastern and South Eastern Divisions of General Practice in which the nursing care of elderly patients with multiple chronic or acute conditions is provided by a nurse employed by the division based on a care plan in cooperation with other Community Health and community services[9]

The practice nurse may undertake a number of roles including:-

- Practice based clinical care by the nurse for patients referred to the nurse by the GP.
- Joint provision of care (eg assisting with surgical procedures)
- Preventive care (eg screening for cervical cancer, risk factor education). The RACGP green-book recommends that each practice appoint a "prevention coordinator" to oversee the organization of preventive activities.[10]
- Conducting specialized clinics within the practice for routine chronic care for diabetes, mental health, asthma, drug and alcohol, immunization, HIV/AIDS, women's and child health.
- Facilitating structured care within the practice (including recall systems, care planning/case conferences)
- Liaison/referral to other services (eg Community Health, Social Security, HACC etc)

Jolly K et al[11] provided evidence that practice based nurses are better in these roles than outreach nurses from hospitals.

An important issue in the creation of IPC is to not attract nurses away from hospitals. The source of the nursing support must wherever possible be existing community based nurses and re-entrants to the workforce. In this regard it is interesting to note that the seven nurses recently recruited by practices in the Southern Highlands of NSW have come from the following sources:

- One was part time in Bowral Hospital and continues in that capacity.
- One came from employment in Sydney due to relocation to the area. She was not interested in hospital work.
- Two were already in general practice employment.
- Three are re-entrants to the workforce.

An experienced senior PHN has made important points in relation to practice nurse recruitment:

- She fully supported the concept of IPC.
- It was preferable to recruit nurses for community based work from outside the hospital system since 'hospital culture' was undesirable for community based nursing.
- Community nursing was a good vehicle to encourage re-entry of nurses to active professional work.

The PHN believed that advertisements for the positions could state firstly that preference would be given to nurses with community based nursing, and secondly, training would be available for re-entrants to nursing.

ii). Modern IT utilisation is a key to optimum care, particularly chronic care. This includes modern record keeping; electronic prescribing (to facilitate medication review); recall systems and data based care monitoring and clinical audit of care against recognised guidelines; and electronic communications with health services.

10.2 'Ideal' IPC model (perhaps more appropriately described as full scale IPC):
This includes GP aggregation into efficient sized units which would contain numbers of PNs and have close working relations with tier two and tier three workers.

10.3 Networking model:
This refers to an anticipated large number of GPs who will remain in dispersed practice who nevertheless wish to adopt IPC principles. It is anticipated that they could employ at least a part time practice nurse and be supported by visiting support personnel. However the visiting would be much less frequent and probably less comprehensive than in the ideal model. This would be a second class model of IPC.

11. GP lifestyle and practice profitability:

It is confidently predicted that IPC will provide GPs with a better lifestyle through providing relief with much of the routine work in the way that other professionals receive assistance from other disciplines. This in no way discounts the professional roles of these disciplines – it reflects the desirable situation of professionals exercising their training and skills. The placement of PNs in country practices has been a great success with numerous GPs making comments such as "I don't know how we got on without them.' These comments do not simply reflect straight out workload relief but also general assistance and load sharing according to discipline.

Studies have shown that the employment of PNs can enhance practice revenues. Whilst this is not substantial in dollar terms it is at least cash positive and in addition PNs free up the GP to earn additional revenues. They also relieve the GPs of activity such as Practice Accreditation activities.

12. Public argument for and likely acceptance of such centres:

It can readily be argued that since IPC centres, combined with ambulatory care programs will reduce hospitalisation needs, they are in the public interest given that care at home is preferable to hospital care wherever possible. It is confidently predicted that people with chronic illness will welcome being able to access nurses who will be able to cope with much of their routine needs. They will find the nurses easier to access, able to spend more time with them and provide more information to them. This has certainly been the experience in relation to diabetes.

13. Funding of the nurses:

The specialist nurses already exist and are mainly funded by State Health Services as are PHNs.

The PNs should be funded by an extension of the Commonwealth's Pratice Nurse Program for rural practices. However recent modeling has shown that PNs can be afforded from practice resources. Commonwealth funding is however preferable since it removes the fee for service imperative which is important for the nurse services.

14. In closing:

Adoption of IPC can result in a 'win/win/win' situation for:

- patients for better care;
- hospitals through reduced workloads;
- GPs through a better lifestyle and increased practice profitability.

However it is anticipated that the uptake of IPC by GPs will not be universal. Full IPC is likely to be more attractive to younger GPs, recent graduates and female GPs. Many existing GPs will opt for networking while many and particularly older GPs will not change their practice culture.

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