Introduction

This document was prepared for the National Department of Health at the request of Dr Terence Carter and Ms Jeanette Hunter, following a round table meeting between them and Profs Naidoo, Hellenberg and Mash, who represented the discipline of Family Medicine of the South African Academy of Family Physicians (SAAFP) and the College of Family Physicians of South Africa.

It was clear from the meeting that a number of problems pertain to the discipline of Family Medicine. Specifically, there were challenges to the realisation of family physicians’ contribution to strengthening the district health services in South Africa.

The purpose of this document was to provide a comprehensive overview of family physicians’ contribution to the health system and to outline issues that need attention.

Policy context

International

The World Health Organization (WHO) has noted that “physicians with a specialisation in Family Medicine or general practice” are usually an essential part of effective approaches to primary care.

The World Health Assembly has also recommended that: “(We need) to train and retain adequate numbers of health workers, with an appropriate skill mix, including primary healthcare nurses, midwives, allied health professionals and family physicians, able to work in a multidisciplinary context, in cooperation with nonprofessional community health workers in order to respond effectively to people’s health needs”.

The Africa Region of the World Organization of Family Doctors (WONCA) has published a consensus statement on the contribution of Family Medicine and role of family physicians in the African context.

National

The National Development Plan specifically recognises the important role that family physicians should play in clinical governance in South Africa, and in improving the quality of district health services. The plan also notes that family physicians who are trained across multiple “specialist areas” can offer useful clinical leadership in the health districts.

A role for family physicians at district hospitals, and as part of district clinical specialist teams (DCSTs), is envisaged in the plans for National Health Insurance (NHI) and the re-engineering of primary care, but their role in relation to primary care and community-based services (ward-based outreach teams) is less clear.

It was suggested in the national Human Resources for Health policy that the aim should be 0.2 family physicians per 10 000 population, which implies a total of 1 060 family physicians for the country. In 2013, there were 545 family physicians on the
new Health Professions Council of South Africa (HPCSA) family physician register, initiated when the discipline was formally recognised as a speciality in 2007, while a further 525 remain on the old family physician register. It is not possible to determine how many of these are in public or private practice, or overseas.

In its response to the draft Human Resources for Health policy, representatives of the discipline of Family Medicine questioned some of the underlying assumptions made when setting this target. For example, the document (National Department of Health’s Health Workforce Model (Annexure B)) appeared to consider family medicine as a subspecialty of medicine in a referral hospital setting, rather than a generalist discipline in the district health services. This resulted in the target for ophthalmologists (0.5 per 10 000 population) being more than twice that of family physicians. The South African Academy of Family Physicians has previously worked on a ratio of one family physician per 10 000 population as a goal, while Prof Rawaf, an adviser to the WHO on primary care and human resources, sets an absolute minimum of three trained family physicians per 10 000. WONCA has a goal of a family doctor for every family.

**Health and health services context**

It is widely recognised that South Africa has a heavy quadruple burden of disease that can be described in terms of human immunodeficiency virus (HIV)/acquired immune deficiency syndrome (AIDS) and tuberculosis, maternal and child health, injuries and violence, and noncommunicable chronic diseases.

Community-based services are poorly developed currently, with pockets of innovation and excellence. It is hoped that there will be more universal coverage through ward-based outreach teams (WBOTs) that are responsible for geographically defined households, and which can also transform the health system to be more proactive, preventive and promotive. There are encouraging examples of early success, such as in the City of Tshwane, where the establishment of WBOTs is being championed by the Department of Family Medicine at the University of Pretoria.

Primary care services at clinics and community health centres are struggling to cope with high patient numbers, the complexity of undifferentiated problems, multiple co-morbidities and serious illness. Eighty per cent of consultations take place with primary care nurses, who have relatively brief training to cope with the complexity and the breadth of morbidity seen. Despite their best attempts, primary care is not yet delivering a quality service that is characterised by adequate access, continuity, co-ordination, comprehensiveness and efficiency. There is also little chance of, or emphasis on, health promotion and disease prevention, which are seen as separate activities or programmes, and are not integrated into the clinical service. There have been significant successes with certain vertical programmes, such as those for HIV/AIDS, but these improvements are not systematic.

Noncommunicable diseases currently dominate the consultation room in ambulatory primary care, and are mostly very poorly managed, with a failure to adhere to guidelines. Often, the focus is on re-prescribing medication, rather than on the comprehensive management of chronic illnesses and the prevention of complications. Clinical care also appears to lack a bio-psycho-social approach. For example, conditions such as depression and anxiety, which are known to be common, go unrecognised, and other mental health problems are poorly managed. The need for services to be more patient centred is also clear.

District hospitals have been shown to lack the ability to provide essential services, for example, in the arena of emergency obstetric care. The skills gap identified at district hospitals in the Western Cape was one of the main reasons why the Department of Health recognised a need for family physicians.

At district level, the National Department of Health has introduced DCSTs as an initiative intended to improve maternal and child health care. These teams includes a family physician (as one of the designated specialists).

**The contribution of family physicians**

Family physicians are expert generalists, who have successfully completed postgraduate training in Family Medicine.

This postgraduate training is organised on the same basis as that for specialists, i.e. a full-time four-year MMed programme, with supervised clinical training in registrar posts, and a single national exit exam facilitated by the Colleges of Medicine of South Africa (CMSA). On graduation, family physicians are registered at the HPCSA in a separate register, in the same way as specialists, and are employed in public service posts at the same specialist rank.

**Roles of the family physician**

Representatives of the discipline of Family Medicine have agreed nationally that the contribution of family physicians should be defined in terms of six key roles (Figure 1).

**Care provider**

Primarily, the family physician is a clinician who has been trained to care for the majority of health problems encountered in both the district hospitals and in primary care. His or her training stretches across multiple clinical domains, as far as they relate to the services provided and competencies required within the district health services. These 10 clinical domains have been described (Figure 2). The clinical skills for this have also been defined in detail nationally, and for example, include the ability to perform emergency obstetric care, general anaesthesia, primary and secondary surveys of trauma patients, closed reductions and the immobilisation of fractures, intraosseous access, fine-needle aspiration biopsy, the interpretation of radiographs and brief behaviour change counselling.

The training of the family physician also embraces the key attributes of an expert generalist. According to Howe: “Medical generalism is an approach to the delivery of health care that routinely applies a broad and holistic perspective to the patient’s problems. Its principles will be needed wherever and
whenever people receive care and advice about their health and well-being, and all healthcare professionals need to value and be able to draw on this approach when appropriate. The ability to practise as a generalist depends on one’s training, and on the routine use of skills that helps people to understand and live with their illnesses and disabilities, as well as helping them to get the best out of the healthcare options that are available and appropriate to their needs.

It involves:

• Seeing the person as a whole, and in the context of his or her family and wider social environment
• Using this perspective as part of one’s clinical method and therapeutic approach to all clinical encounters
• Being able to deal with undifferentiated illness and the widest range of patients and conditions

- In the context of primary care, taking continuity of responsibility for people’s care across many disease episodes and over time
- Also in primary care, coordinating his or her care, as needed, across organisations within and between health and social care,19

**Consultant**

Although the family physician is trained for primary care, the current nurse-led primary care system often places the family physician in a consultant role in relation to primary care nurses and other members of the primary care team. It is expected therefore that the family physicians will see patients who are referred to them with more complicated problems.

The family physician is often the most highly trained member of the clinical team, even at district hospitals, although there may be experienced career medical officers in certain areas of the hospital. Again, the family physician can act as a consultant to more junior team members, such as interns, community service medical officers and clinical associates.

**Capacity builder**

One of the key roles of a family physician is that of a clinician, with the necessary knowledge, skills and attitude to serve as a role model and a resource to the primary care team. Therefore, he or she will spend time mentoring and building capability among other members of the team, such as community health workers, primary care nurses, clinical associates and junior medical officers. Sharing expertise through role modelling, mentoring, consulting and continuing professional development is seen as a key role, and is part of the training for family medicine registrars.

**Supervisor**

The family physician may also take on specific responsibility for the clinical training and supervision of undergraduate (medical and clinical associate students) and postgraduate students (registrars), as well as interns, in certain training facilities.
this, additional expertise in teaching, training and assessment is required.

Leader of clinical governance

Clinical governance, with the intention of improving the quality of clinical care, is a key role expected of the family physician, and he or she is expected to have expertise in quality improvement cycles, risk management, the implementation of guidelines, evidence-based practice, and research and training. Family physicians should be “change agents” in the system, offering significant leadership to help take the health services forward.

The family physician is not expected to take responsibility for other traditional management activities, such as managing human resources, and infrastructure and finances. Although this is not seen as their responsibility, they will often contribute to these issues as senior clinicians, and as part of the leadership within the facility.

Champion of community-orientated primary care

In addition to focusing on the needs of individual patients, the family physician is expected to champion awareness of the population at risk and the community served by the health facility. Patients are assessed and managed within the context of their families and communities, and the family physician will often take the initiative to support or develop community-based health programmes to address common problems. In practice, this may mean making sense of community health needs and priorities, supporting the functioning of WBOTs, or helping to plan interventions to address community health needs. The development of and research into the implementation of WBOTs is of particular importance at this time. The family physician is well placed to participate in developing these teams as a quality service, and especially in integrating them into a seamless continuation of care from the home and clinic to the hospital and back.

Role differentiation and maturation

It’s a lot to expect for a newly qualified family physician to completely fulfil all the outlined roles. In reality, experience is that role differentiation does occur once the family physician is in place. For example, when two family physicians are employed in a subdistrict, one may focus on supporting the primary care platform and community-orientated primary care, while the other concentrates on care within the district hospital. Similarly, one may focus almost entirely on service delivery, while the other also takes on the formal supervision and training of students and interns. The family physician may also take responsibility for specific areas of a large district hospital, while retaining a generalist stance across all areas after hours.

The family physician’s role in management also seems to shift over time as he or she gains experience and seniority. Newly qualified family physicians (grade 1 specialists) focus on clinical work and immediate clinical governance issues, while more senior family physicians (grade 2-3 specialists) tend to take on the role of training complex coordinators and contribute more to subdistrict and district management teams.

Role clarification

This section discusses the role of the family physician in relation to other members of the healthcare team.

Community health workers and ward-based outreach teams

WBOTs are envisaged as consisting of groups of community health workers, supported and supervised by nursing staff, usually from the local clinic. In addition, there is a need for primary care doctors to assist the teams with capacity building, making sense of information gathered and planning effective responses, as has been demonstrated in the City of Tshwane. Community-orientated primary care requires input from this level of expertise in order for it to be successful. The family physician can make a useful contribution by helping to guide and co-ordinate multiple WBOTs at subdistrict level, again as modelled in the City of Tshwane.

Primary care nurses

Currently, primary care nurses are the backbone of a nurse-driven primary care service, as they offer the majority (80%) of first-contact care. As has been stated previously, they may struggle to provide the quality of generalist care required, given the breadth, complexity and undifferentiated nature of the health problems with which they are presented. The family physician can be instrumental in improving capacity and quality of care.

Clinical associates

Clinical associates have been trained to assist with clinical care in the district hospital. The family physician champions the integration of clinical associates into the health service. Family physicians in the district hospital would be involved in training, mentoring and supervising them, as well as promoting their role within the healthcare team.

Primary care doctors

Thousands of primary care doctors in the country are already in the health system, and working as either medical officers in the public sector, or general practitioners in the private sector. Primary care doctors are not required to undergo additional training after their undergraduate degree, although some undertake diplomas and short courses. Therefore, the different competencies of primary care doctors are highly variable.

Junior medical officers in the public sector should be encouraged to apply for registrar posts and to train as family physicians, if they decide to pursue a career in the district health system. Established senior medical officers or general practitioners, who it is most likely will not pursue further training to become family physicians, should be encouraged at least to obtain a postgraduate diploma in Family Medicine and Primary Care. It is most likely that the family physician would be placed at community health centres in this context in the near future,
where he or she would offer clinical expertise and leadership to the team, including the other primary care doctors.

The family physician can also enter the private sector although his or her additional training and equivalent specialist status is not yet fully recognised by funders, which is a factor in making the career path unattractive to many doctors.

The two-year diploma in Family Medicine and Primary Care is currently being revised at national level in order to align it better with the future direction of the health system, and to help primary care doctors re-orientate and improve their skills. The roles of the primary care doctor are envisaged to echo those of the family physician, but are limited to the primary care setting. In addition, there are lower expectations of the primary care doctor than of the family physician. The future roles that have been conceptualised are competent clinician, critical thinker, capability builder, collaborator, change agent and community advocate.

Medical officers in district hospitals

Family physicians employed at the district hospital are expected to be competent across the full package of care, and to be able to lead the rest of the team in delivering on this. The medical officer establishment is very small and junior in some district hospitals, and family physicians bring a new level of clinical expertise and leadership. Existing career medical officers in other district hospitals may be very competent in specific clinical areas, sometimes even more so than newly qualified family physicians. However, using a long-term view, the family physician would become the most senior clinician at the district hospital, and would also bring his or her additional roles to bear in terms of capacity building, supervision, clinical governance and community orientation.

Facility and district managers

It is not intended that the family physician should take the place of the facility manager or chief executive officer. As the most senior clinician in the facility, he or she should work closely with the manager to improve the quality of care and efficiency of the health services. It may be that qualified family physicians will be employed in this role in some instances. A clinical manager may be appointed to manage the clinical services under the chief executive officer in larger district hospitals. In this scenario the family physician may advise and influence the clinical manager on issues of corporate governance, but remains a clinician and not a manager.

District clinical specialist teams

The family physician, in conjunction with the other specialists and team members, has been appointed as a member of the DCST. DCSTs were established with a specific focus on improving maternal and child health care at district level. The family physician is an important member of the team as he or she enables effective engagement with the district. However, it is clear from the aforementioned discussion that being a member of the DCST is not considered the main role of the family physician in the district health services. Rather, the majority should be located clinically within the district health services themselves, and not just at the level of the district in the DCST. This also implies that there should be many family physicians per district, typically employed in subdistricts, community health centres or district hospitals. Their training as expert generalists is also incongruent with a specific focus on maternal and child health care only.

Public health specialists

Public health specialists and family physicians have very different but complementary roles in the district. The family physician is primarily a clinician who works with the community-based, primary care and district hospital teams to provide high-quality clinical care to individual patients. The public health specialist brings expertise in epidemiology, community health, health policy, health information and management from a population perspective and at district level.

Community-orientated primary care is a bridge between the family physician and public health specialist as it is in this role that the family physician is required to think about the population at risk as a whole, and the health needs of households at community level.

Emergency medicine specialists

Emergency Medicine is a new speciality in South Africa, which emerged at the same time as Family Medicine. Emergency Medicine specialists clearly play a role in providing care and clinical leadership within dedicated trauma and emergency centres with a sufficient workload. Emergency medicine specialists have a clear and separate role from family physicians at the central, tertiary and regional hospitals, although there are still examples of family physicians leading emergency departments in regional hospitals. At large district hospitals, particularly in urban areas, there may also be a place for emergency medicine specialists to work alongside family physicians and to take responsibility for the emergency centre. Family physicians take responsibility for emergency care in smaller and more rural district hospitals and community health centres.

Other medical specialists

Generally, other medical specialists are located within central, tertiary and regional hospitals, where there is little overlap with the role of the family physician. Some regional hospitals have created Family Medicine departments that focus on district-type services offered within the regional hospital, but the natural habitat of the family physician is within the district. In addition, some large district hospitals (especially those in urban areas that offer services over and above the district hospital norm) also employ other specialists alongside the family physician. However, generally speaking, other medical specialists are not employed within the district health services. Their role is within the DCSTs, or in performing outreach and support from the regional hospitals.
Family physicians play an important role in integrating care from other medical specialists into the district. They collaborate with other medical specialists to ensure the coordination of patient care between different levels of the health system, so that their knowledge and expertise is available, where appropriate, to the district services.

Early evidence of impact

Family physicians from the new registrar training programmes only started graduating in 2011, and so it is too early to evaluate their impact. Nevertheless, initial research has been conducted in the Western Cape, in which the deployment of family physicians has been included as part of the strategic planning for some time. The number of family physicians increased from 21 in 2011 to 45 in 2014 within the district health services, at both the district hospitals and community health centres.

It has been suggested in annual interviews with the district managers in 2012 and 2013 that family physicians have had a positive impact on the quality of the clinical processes, with specific examples given for HIV/AIDS, tuberculosis, maternal and child health, noncommunicable diseases and mental health. In addition, they appear to have had some impact on health services performance in terms of improved access to care, better coordination, and the provision of a more comprehensive and efficient service.

One of the registrars developed and piloted a family physician impact assessment tool in the Winelands and Overberg Districts, according to which the family physician’s impact was evaluated in terms of the six key roles and perspectives of the people working alongside them. The initial results (Figure 3) show that the main perceived contribution of family physicians was in the area of clinical care, i.e. consulting patients referred to them by other members of the healthcare team, and in clinical governance. They had a moderate impact in terms of building the capacity of the healthcare team and on clinical training supplied to students and registrars. The least impact that they had was in the area of supporting community-orientated primary care.

Implications for posts and career paths

Public sector posts

It is clear from the aforementioned overview of the roles and contribution of the family physician that posts should primarily be created for family physicians at:

- Subdistrict level to develop and support the WBOTs and primary care services within that subdistrict. This may mean employing family physicians for all or part of a subdistrict, or employing a family physician at each community health centre with responsibility for the local area served by that centre too.
- District hospitals.

Initially, as a country, the short-term goal should be to have one family physician employed per subdistrict and district hospital.

There are 104 subdistricts with no community health centres, 321 community health centres in the remaining subdistricts, and 254 district hospitals in South Africa. Therefore, 680 family physician posts would be required to achieve this short-term goal. Given the current number of registered family physicians and the nine training programmes, this is a feasible goal. In terms of the WHO's Workload Indicators For Staffing Need process for primary health care, this would mean including the family physician as a full-time post on the normative guideline for community health centres or subdistricts.

The misunderstanding in some provinces that “specialist” family physicians cannot be deployed in the district health services needs to be discussed. Likewise, the concept that there should be a Department of Family Medicine in a district hospital is also contrary to the generalist nature of the family physician, who works across the whole hospital, and not in a section of it. Where facilities are part of training programmes for undergraduate or postgraduate students in Family Medicine, it may also be necessary for there to be more than one family physician in order to ensure quality training. It will be necessary to have more than one family physician in large district hospitals to deliver the service required.

Additional posts for family physicians have also been created as part of the DCSTs, and there is a need for a Department of Family Medicine in some regional hospitals. However, this is not seen as the norm with regard to deploying family physicians within the health system.

Private sector posts

The failure to fully recognise the discipline of Family Medicine in the private sector is a major disincentive to doctors not wanting to remain in the public sector to enter the training programmes. This recognition does not extend to tariff and remuneration only, but also to their postgraduate training and the larger skills set and competencies that they consequently bring.

Ensuring that the regulatory environment in the private sector recognises family physicians is an important goal to growing the discipline.
Career path

The future career path for a doctor intending to commit to a career in the district health system should be one of initial experience as a junior medical officer in the district health services, followed by entry into a four-year registrar post and qualification as a family physician, who is then subsequently employed in either the public or private sector (Figure 4). This end-point may be replaced by entry into the NHI scheme as a family physician in the long term. This career path should eventually replace the current concept of a career medical officer.

Existing primary care doctors who are unlikely to train as family physicians should be encouraged to complete the diploma in Family Medicine and Primary Care. In future, this diploma could also be a stepping stone to training as a family physician for those who are unsure about whether or not to fully commit, or for those who want to prepare themselves better.

Current training programmes

Current situation and achievements

Currently, there are nine training programmes for family physicians in the country, offered by the medical schools at Cape Town, Stellenbosch, Free State, Witwatersrand, Pretoria, Limpopo, Sefako Magatho, Kwa-Zulu Natal and Walter Sisulu Universities. A new department at Nelson Mandela Metropolitan University (Port Elizabeth) is expected to be established in the near future.

These nine training programmes are coordinating their activities through the South African Academy of Family Physician’s Education and Training Committee. (Previously this was performed by the Family Medicine Education Consortium.)

Key successes of this collaboration are:

• Consensus on the six key roles of the family physician in the health system (Figure 1).15
• A clearly defined set of unit standards and learning outcomes.22
• A clearly defined set of clinical skills, which are about to be revised again.17
• A defined portfolio of learning in the workplace.23
• Textbooks, such as the *Handbook of Family Medicine* and the *South African Family Practice Manual*.24,25

The College of Family Physicians of South Africa currently offers a single, national exit examination in which all training programme participate.23

The training programmes are organised on the same principles as specialist training:

• Four years of clinical training in a registrar post, with exposure to primary care, district hospital and regional hospitals. Supervision is required from a family physician or other medical specialists in the regional hospital.
• Enrolment in a Master of Medicine degree, which requires a research assignment.
• A final examination by the CMSA, leading to a Fellowship qualification.
• Accreditation of the training programmes and complexes by the HPCSA.

Two professional bodies are currently involved in the discipline of Family Medicine in South Africa. The South African Academy of Family Physicians focuses on coordinating and developing education and training at national level. It also represents the discipline via the South African Medical Association, offers an annual conference and a national scientific journal, and represents

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**Figure 4**: Career pathway for the family physician

MMed: Master of Medicine degree
the discipline globally at WONCA, as well as accrediting and offering continuing professional development. The College of Family Physicians of South Africa is part of the CMSA, and focuses almost entirely on the national exit examination.

**Challenges of the current training programmes**

The training programmes have many challenges in terms of their implementation and consolidation. We will highlight challenges that require assistance from the National Department of Health in this position paper.

At the time of writing there were only 12 new graduates from across the country in the last College of Family Physicians of South Africa examination. Of course, this output is too small a number to make a difference. Training programmes need to accelerate (to at least double) their output if the human resource goals are to be met. It appears that family physicians have only been deployed at scale within the Western Cape, where currently, 45 family physicians are employed in the public sector and 50 registrars in training.

To attract junior doctors to enrol in a career in the district health system as a family physician, they need to experience positive role models and examples during their undergraduate careers and during their careers post graduation. Currently, there are not many family physicians in posts within the district health services in many provinces. Therefore, the discipline remains somewhat invisible. Creating posts within the district health services and employing family physicians in these posts, as well as many existing, unfunded or unfilled posts, is critical for their contribution to the services, and also for the success of the training programmes.

Prior to 2007, the Family Medicine training programmes were part time, less standardised and focused on primary care, rather than district hospitals. Most family physicians on the current register would have been trained in these previous programmes. Many of these family physicians also failed to migrate across from the old Family Medicine to the new specialist HPCSA register. This is also being discussed with the National Department of Health presently. This also means that care must be taken when employing family physicians at district hospitals to ensure they have the correct skills set as not all training programmes previously included this. All of them would have been trained appropriately for primary care. A rapid assessment team in the Western Cape has successfully been used to evaluate the suitability of applicants from the older training programmes for work in the district hospitals.

The success of the training programmes does not just depend on having a family physician in the post to fulfil the HPCSA requirements (one family physician for four registrars). It is also important for the family physician to have the capacity to provide quality clinical training. This capacity depends on the capability of the family physician, who may need additional training for this, as well as the environment. Key factors in the environment include the ability of the family physician to devote time and energy to clinical training and teaching. Often, service delivery takes precedence over this. Therefore, it is necessary to create extra capacity by safeguarding a percentage of the family physician’s time for this role. This may require having more than one family physician at the accredited training sites, and placing one of them on the joint staff with the university. If family physicians are to fulfil the six roles previously described, it is also important that they work with a sufficient staff complement. When there are no junior medical officers in the facility, for example, family physicians are forced to work in their place, and are unable to contribute in terms of consulting, mentoring and supervising, and providing clinical governance and community-oriented primary care.

Once doctors are interested in applying for the training programmes, registrar posts will need to be available in order for them to enter. There are very few registrar posts in Family Medicine in many provinces, and the financing of such posts is not secure on an ongoing basis. Registrars are also expected to assume an enormous service load, which does not make the posts attractive. Family Medicine has attracted interest from foreign doctors working in South Africa, but these doctors have often not performed well on the training programmes, or plan to leave the country on qualifying. When selecting registrars, there is a need to focus on South African citizens and permanent residents who are committed to the district health system.

**Key recommendations**

These are the key recommendations outlined in this position paper:

- As a country, initially the short-term goal should be for one family physician to be employed per subdistrict and one per district hospital.
- It is important to ensure that decision-makers in the regulatory environment in the private sector fully recognise family physicians as an important component of healthcare provision.
- It is important to ensure that family physicians working in accredited training sites have sufficient capacity to provide quality training through additional family physician posts and joint staff positions.
- It is important to ensure that sufficient registrar posts are available for each training programme, and that the finances for these posts are secured on an ongoing basis.

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**References available on request**