

# Malta's specialist training programme in family medicine: a pre-implementation evaluation

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## Abstract

**Introduction:** As a result of Malta's EU accession in 2004, family medicine was accepted as a speciality and the Malta College of Family Doctors prepared a Specialist Training Programme in Family Medicine. To facilitate its launch, potential GP trainers and trainees participated in its pre-implementation evaluation.

**Method:** Participants' views were gathered quantitatively through a questionnaire using scales to rate closed statements regarding the programme and its sections. Qualitative open-ended questions also allowed them to highlight strengths and provide constructive feedback regarding any required improvements and perceived barriers.

**Results:** Nearly half the questionnaires (27/58: 47%) were returned. Although the majority of participants evaluated the programme and its sections as specific, attainable, relevant and timed, only a minority agreed that they were easily measurable. The strengths mentioned most were the various methods of assessment (41%), experience in relevant hospital specialities (37%), and preparation and updating of trainers (30%). The improvements seen as most needed were the identification of resources (22%), the acquisition of competences (19%) and their assessment (19%). The main barriers identified were the use of trainees just as locums (41%), poor attitudes among the various stakeholders (37%) and difficulties in coordinating assessment methods (26%).

**Discussion:** To assist the programme's implementation, the development of a well-supervised curriculum is needed, supported by the resources necessary for the preparation and updating of motivated trainers and the acquisition by trainees of the required community and hospital competences and their objective assessment. While a post-course evaluation of specialist training in family medicine in Malta is merited, pre-implementation evaluation is of use in preparing to implement postgraduate training.

## Keywords

Education, family practice, program evaluation, Malta

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## Introduction

As a result of Malta's accession to the European Union in 2004, family medicine was accepted as a speciality and a Specialist Training Programme in Family Medicine – Malta was drawn up by the Malta College of Family Doctors (MCFD) in 2005 and approved by the Specialist Accreditation Committee in 2006. Specialist Training in Family Medicine in Malta takes place under the auspices of the state Primary Health Department, with the MCFD responsible for ensuring its academic quality. So as to focus on the learning needs of family medicine, the three-year programme is based in family practice and taught by GP (general practitioner) trainers, while supplemented by attachments with appropriate hospital specialities.<sup>1</sup>

The programme's launch was seen to be complicated by a number of issues within Maltese family practice. These include the busy schedule of GPs, a lack of continuity of care, deficiencies in record keeping, different types of patient cases/conditions seen by public and private GPs and the low income of state GPs.<sup>2</sup> The situation thus merited a pre-implementation evaluation<sup>3</sup> by individuals aware of such shortcomings.

While a search of the literature did not identify any evaluations of vocational training programmes *prior* to implementation, there is evidence that evaluation is important in ensuring quality and success in provision of teaching programmes in general,<sup>4</sup> and family-doctor training in particular.<sup>5</sup> Furthermore, trainers and trainees have been identified as the main stakeholders in the design and quality of GP vocational training,<sup>6-9</sup> and their active participation in the development and process of training in family medicine is an important factor for its success.<sup>8-12</sup>

The aim of this study therefore was to obtain the views of prospective trainers and trainees of Malta's proposed Specialist Training Programme in Family Medicine and use such views to improve the design of the programme and facilitate its implementation. Its objectives were to assess their attitudes to the programme, highlight its strengths, propose solutions for any identified weaknesses and possible barriers, and incorporate recommendations to aid its launch. It was envisaged that participants' proposals would enhance the programme's implementation,<sup>9</sup> improve their motivation as future trainers/trainees, and ensure the provision of quality training in family medicine.

## Methods

A mixed methodology was used, incorporating both quantitative and qualitative methods, in order to obtain triangulation of data and improve research validity. The

primary survey instrument consisted of a questionnaire, which also served to gather the participants' professional and academic details. A draft of the questionnaire was first piloted using two focus group meetings, involving six potential GP trainers and six prospective GP trainees respectively, and modified accordingly.

The final version of the questionnaire was mailed in December 2006 with a copy of the specialist training programme to two groups of participants, totalling 58 in all. One group consisted of 23 Maltese family doctors trained as GP trainers in Malta and the UK, with the other made up of 5 doctors appointed GP trainees in April 2006 and 30 post-registration doctors interviewed for the post of GP trainee in September 2006. After being completed anonymously and on an informed-approach basis, the questionnaire was to be returned by post in a pre-addressed and stamped envelope. Two reminders were sent to participants after the set closing date to obtain the best achievable response.

The quantitative section of the questionnaire consisted of a Likert 5-point rating scale ('strongly agree', 'agree', 'neutral', 'disagree', and 'strongly disagree') to assess participants' views of a number of SMART statements regarding the specificity, measurability, attainability, relevance and timing of each section of the programme and of the programme as a whole. The titles of the different sections of the programme were: duration; main areas covered; criteria for completion and award of specialist certificate; qualifications for trainers, training practices & coordinator; duties of trainers and coordinator; and obligations of trainee.

The resulting data (and respondents' professional and academic details) were inputted into a spreadsheet within Microsoft Excel®, presented graphically (through tables) and subjected to statistical analysis using SPSS®.

The qualitative method comprised the following 3 open questions:

- What are the strong points of this section / programme and why do you think so?
- If you believe this section / programme needs improvements, would you kindly make constructive suggestions?
- What barriers might impede implementation, and how would you avoid / negate these barriers?

Qualitative analysis was performed by the researcher inputting all data into a Microsoft Word® document, where key data were highlighted (data reduction), after which 'data interpretation' was used to draw up themes.

### **Ethical considerations**

Authorisation was obtained from the acting Director of Malta's Primary Health Care Department, and ethical approvals from the research ethics committees of the Universities of Malta and Ulster. Participants were informed that they would be part of a research study intended to assist the Primary Health Care Department to develop and implement specialist training

in family medicine in Malta. Participation was entirely voluntary and anonymous, and the confidentiality of participants in the focus group was ensured as only the researcher analysed the data, with no reports ever identifying participants in any way.

### **Results**

Twenty-seven questionnaires were returned out of 58 that were mailed (47% response), 14 from potential trainers and 13 from prospective trainees, each group exceeding the proposed number of trainers and trainees to be appointed (12 of each). The academic and professional characteristics of the respondents are illustrated in Table 1.

#### **Quantitative Results**

The majority of respondents (>50%) viewed the programme as specific, attainable, relevant and well-timed, but only a minority agreed that the overall programme and the following components were easily measurable:

• Formative assessment methods	33%
• Overall programme	37%
• Objectives of practice-based training	41%
• Community competences	42%
• Hospital competences	46%
• Selection methods for trainers, practices and the coordinator	48%

Taking significance as a p-value of <0.05, the Fisher Exact T non-parametric test of association of the statements with respondents' professional characteristics (trainer or trainee) revealed two that were statistically significant and of practical value. The first statement was that 'Hospital-based training competences are easily measurable', with which 8 prospective trainers agreed while 8 potential trainees were unsure (p=0.030). Five prospective trainers disagreed with the other statement 'Summative assessment methods are attainable', while 5 potential trainees remained neutral (p=0.042). Statistical analysis thus emphasised participants' doubts about the programme's measurability, specifically regarding assessment of hospital competences (from trainees) and summative assessment (from trainers).

#### **Qualitative Results**

The top strengths of the programme as identified by participants are listed in Table 2 with three from the first six concerning assessment. The most needed improvements revealed by respondents are seen in Table 3, with identification of resources mentioned twice among the top four. Problems with resources were also included three times among the main perceived barriers to the launch of the programme (Table 4).

### **Discussion and Recommendations**

It is evident from the evaluation results that a comprehensive curriculum backed by the necessary resources is needed to complement the concepts presented in the training programme, with special attention being given to measurability in general

and assessment in particular. This discussion will thus follow the components of the curriculum cycle illustrated in Figure 1, making the appropriate recommendations accordingly.

The programme's educational philosophy should primarily focus on the teaching of family medicine, supported by hospital training adapted to the needs of the trainees.<sup>15</sup> Thirty-seven per cent of participants believed that this requires a climate of motivated teaching through relevant practice to be instilled among stakeholders, with any subjectivity being avoided through the assignment of two trainers per trainee. An emphasis should also be put on the provision of support and flexibility for trainees during the training period to prevent personal and work-related problems.<sup>10,15</sup>

Twenty-two per cent of respondents stated that needs and resources must be identified, primarily through an assessment of the stakeholders' needs, with bureaucratic barriers then being overcome to facilitate the provision to the programme of its vital resources (human, financial, organisational, educational and material).<sup>16-18</sup> Among the human resources are the trainers, which thirty per cent of respondents believed should be prepared and keep up-to-date<sup>9</sup> while practising competently.

A well-structured programme with an explicit aim and clear objectives was emphasised by 22% of participants as being essential for adults to integrate learning with their other commitments. A number of prepared protocols therefore are required, such as comprehensive operational details, procedures for rescue of candidates, and a process of evaluation for improvement.<sup>19</sup>

While 26% of respondents appreciated that the content of the training programme was equally divided between the essential fields of family and hospital practice, 37% praised the broad spectrum of hospital specialities which would be useful to facilitate practice with confidence in primary care.<sup>12,17</sup> The logbook was emphasised as an important tool in training to rate competences as essential, important and inspirational.<sup>19</sup> Forty-one per cent of participants insisted that the organisation of the programme must ensure that trainees are given responsibilities relevant to family practice and not be used just as locums. Thus, in order to ensure that hospital work and training are focussed towards family practice, rotations should start with an attachment in the community and then alternate regularly between secondary and primary care throughout the three-year programme.<sup>20,21</sup>

Strategic objectives must be set and categorised according to the role of the stakeholder (the trainee, trainer or coordinator) while focussing on the two teaching methods envisaged by the programme. Eleven per cent of respondents emphasised the importance of one-to-one teaching (the first method) in developing trainee-trainer trust. Each trainee should choose one trainer in private practice and another in government practice, with back-up measures prepared for tackling any problems within the trainer-trainee relationship.<sup>16,22</sup> The second teaching method is the weekly half-day release course that provides protected time for group meetings consisting of suitable academic activities<sup>12,16</sup> and practical discussions

**Table 1:** Academic and professional details of questionnaire respondents

<b>Characteristic</b>	<b>#</b>	<b>%</b>
<i>All respondents:</i>	27	100
Prospective trainee	13	48
Potential trainer	14	52
Any postgraduate studies	22	82
Postgraduate studies in Family Medicine only	12	44
Other postgraduate studies only	16	59
Postgraduate studies in both Family Medicine & other topics	5	19
No postgraduate studies	5	19
<i>Prospective trainees:</i>	13	100
Underwent undergraduate Family Medicine teaching	10	77
Experienced a student attachment with a GP	11	85
Worked in health centres (e.g. as a house officer)	10	77
Choice of GP trainee post first/only preference	9	69
<i>Potential trainers:</i>	14	100
Undertook formal Vocational Training in Family Medicine	3	21
Full time practice	11	79
Reduced hours / part-time practice	3	21
Work in group practice	4	29
Work in solo practice	4	29
Work in both group and solo practices	6	42
Work in government practice	1	7
Work in private practice	8	57
Work in both government and private practices	5	36

regarding relevant experiences or difficulties encountered, while also serving as a model for lifelong learning.<sup>11</sup>

Assessment requires a pre-determined syllabus of required competences and 41% of participants believed it should be made up of both formative and summative methods. Twenty-six per cent thought that formative assessment would facilitate ongoing motivational feedback and saw it as a just, reliable and valid measure of knowledge and performance over the whole 3-year period. Portfolio-based learning was deemed a useful tool in this regard<sup>23</sup> as long as it incorporates a practical logbook which is assessed objectively in order to allay GP trainees' doubts

(revealed by the statistical analysis) regarding assessment of hospital competences.

Summative assessment would preferably be carried out in stages, allowing trainee preparation through mock tests. Twenty-two per cent of respondents believed that importance of objectivity in assessment was important; standardised rating therefore is essential for reliability & objectivity that is ensured through evaluation by an independent examination board.<sup>16</sup> As statistical analysis revealed the opinion of GP trainers that summative assessment methods were difficult to attain (probably due to limitations in resources), few but efficient

**Table 2:** Top strengths of the programme as revealed by participants, together with relevant comments

<b>Programme's top strengths</b>	<b>% of respondents</b>
Various methods of assessment	41
Experience in relevant hospital specialities	37
Preparation and updating of trainers	30
Equal emphasis on community & hospital training	26
Formative assessment is just, reliable and valid	26
Ongoing assessment with feedback	26
Well structured programme with explicit plan, clear objectives	22
Practice-based obligations of trainees	19
Focuses on specific learning needs of trainer and trainee in Malta	15

**Comments regarding various methods of assessment**

'The varied amount of work to be done – from small group activities to videos to PEPs (Phased Evaluation Programmes) – encourages me to continue studying throughout the 3 years and broaden the knowledge on various subjects. It is also a good source of motivation – not just writing & studying – (and) aids a degree of conversation between trainer & trainee.' (Prospective trainee 2)

'The whole work done during 3 years cannot be measured only in the last month. In my opinion a student during the course of 3 years will have his ups and downs and so in a formative assessment these ups and downs will balance out'. (Prospective trainee 4)

**Comment regarding experience in relevant hospital specialities**

'One needs to have good knowledge on a broad spectrum of disorders – not focus on just a particular section. To achieve this you need a programme which allows time for you to grasp the various subjects'. (Prospective trainee 2)

**Table 3:** Improvements most needed by the programme as identified by respondents, together with a relevant comment

<b>Improvements most needed by programme</b>	<b>% of respondents</b>
Identification of necessary and appropriate resources	22
Acquisition of competences	19
Assessment of competences	19
Sufficient resources for training	15
Improvements in trainers' roles	11
Need for flexibility for success of programme	11
Part-time distribution of training between community and hospital	11
Procedures for eventualities of trainer/trainee problems	11
Role of stakeholders in evaluation of programme	11
Standardised and focused portfolio	11

**Comment regarding identification of resources**

'I would ensure that the trainers are as front liners as best equipped in their resources (all!) to be able to impart their best and deliver with impact on the trainees. I strongly believe that 'one cannot share something before you own it'. One needs to continue investing in and encouraging the trainers.' (Potential trainer 14)

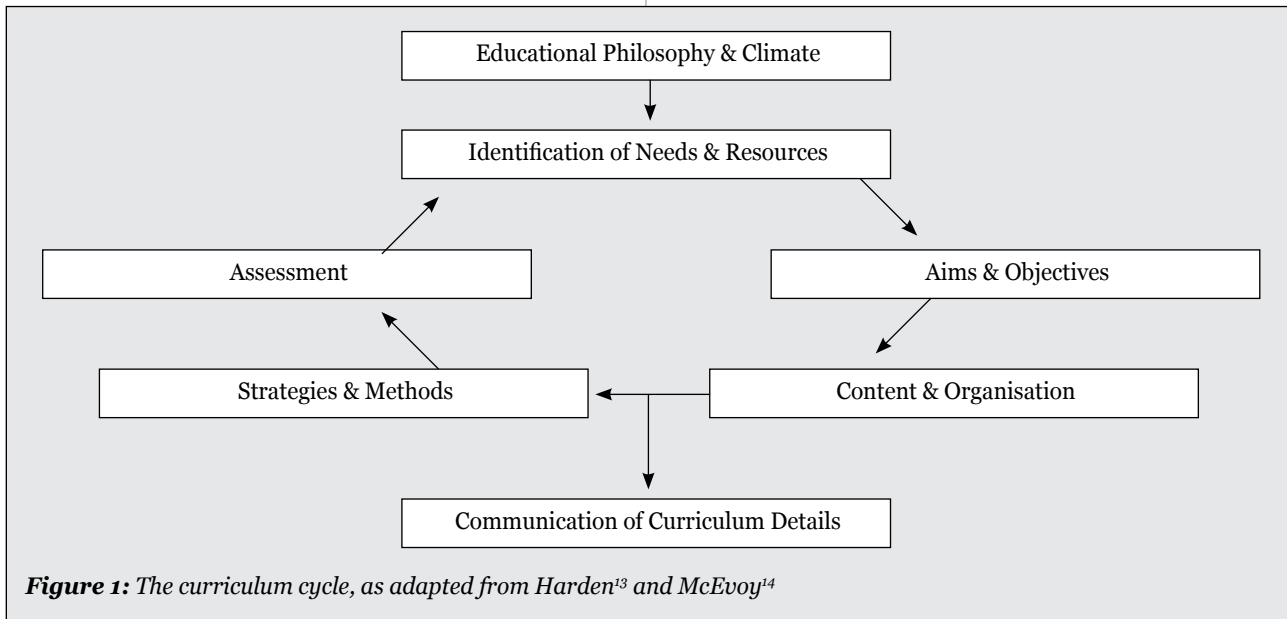
methods would be used, such as a portfolio, trainer's report and project for formative assessment, and multiple-choice questions, modified essay questions and objective structured clinical examinations for summative assessment.<sup>24</sup>

The management of the programme should be supervised by a central body made up of representatives of all the stakeholders with the responsibility and authority to monitor such programme. Twenty-two per cent of participants recommended the complementary use of efficient communication between all concerned, to ensure learning on the job for trainees, foster

motivation<sup>25</sup> among all participants and tackle any teething problems in the best possible manner, while effectively evaluating and fine-tuning the programme.<sup>19</sup>

**Limitations of study methods**

Any reactivity of participants, where the person filling the questionnaire would have wanted to give the researcher a reply to please the latter, was avoided through the questionnaires being anonymous. The low response to postal questionnaires sent to samples of GPs has long been recognised.<sup>26,27</sup> However,



**Table 4:** Main barriers to the launch of the programme as listed by participants, together with relevant comments

Main barriers to programme's launch	% of respondents
Use of trainees just as locums	41
Poor attitudes among the various stakeholders	37
Difficulties in coordinating assessment methods	26
Non-provision of resources needed for implementation	22
Poor communication between stakeholders	22
Subjectivity in trainer-trainee assessment	22
Lack of resources hindering acquisition of competences	19
Unfavourable work environment	19
Relationship problems between trainer and trainee	15
Resource-intensive assessment methods	15
Unavailability and indifference of hospital-based trainers/consultants	15

**Comment regarding use of trainees as locums**

'(A) definite barrier will be the shortage of medical doctors in our country both in hospital and more importantly in health centres. I am convinced that we will end up filling up for the shortage of staff. (The) College needs to take a strong stand on this in front of government and insist that we are there for training not to do the dirty work.' (Prospective trainee 8)

**Comment regarding poor attitudes among stakeholders**

'To be as blunt as possible, kindly make sure that the aim of training is to make the trainee love his speciality. The aim of training should not be to scare people away so that the trainer's daily bread will not be threatened. That's happening big-time across Maltese hospital-based specialties. Beware!' (Prospective trainee 3)

**Comment regarding problems with resources**

'The coordinator must be given facilities/resources to step in and correct deficiencies in the training programme as they become apparent or brought to his attention by the trainee or by the trainer.' (Potential trainer 5)

when one considers that this questionnaire was sent to the whole population of potential trainers/trainees and not just a sample, the study's response rate of just below 50% can be considered as acceptable. A possible non-response bias by disinterested doctors could have been investigated if the non-respondents were contacted to inquire as to the reason for their non-response. In his role as training coordinator, the researcher had an interest that the programme be implemented successfully; this served to minimise any bias on his part when interpreting constructive criticism provided by questionnaire respondents.

## Conclusion

To facilitate the launch of Specialist Training in Family Medicine in Malta, potential trainers and trainees have recommended that the programme be developed into a comprehensive curriculum that is well-supervised. Such curriculum must be supported by the resources necessary for the preparation and updating of motivated trainers and the acquisition by trainees of the required community and hospital competences and their objective assessment.

As this innovative pre-implementation evaluation of a specialist training programme involving stakeholders has provided useful recommendations regarding its improvement and launch, it may be of use to coordinators preparing similar postgraduate training programmes.

Since implementation is but a first step towards fulfilling the programme's "aim of producing competent, reflective and self-educating family doctors (who have) fulfilled the training requirements to work in Family Practice in Malta",<sup>1</sup> a post-course evaluation of specialist training in family medicine in Malta is merited. This would not only evaluate the course itself, but also any effect that the pre-implementation evaluation might have had on its quality and success.

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