

Market Access Professionals in the Pharmaceutical Industry in the United Kingdom: Essential Roles, Knowledge, Skills, and Attributes

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ABSTRACT

Introduction. Clearly defined roles and educational standards are crucial for enhancing professional status and facilitating Market Access (MA) in the pharmaceutical industry (pharma). However, literature on this topic remains limited. This study explored MA professionals' roles within pharma in the United Kingdom (UK), including the knowledge, skills, competence, and other attributes required.

Materials and methods. A document analysis of UK MA job advertisements from pharmaceutical companies, National Health Service websites, and Google search engine was undertaken between February and August 2019, and updated between 1st and 31st August 2023. Thematic content analysis was used to analyse the data.

Results. Eighty advertisements met the inclusion criteria, classified by seniority: entry-level (44%), senior level (15%), pricing and reimbursement (11%), and head/director positions (30%). Entry-level roles displayed the most variability in titles. A degree in a relevant field was required for 86% of these positions, dropping to 38% for senior MA roles. While skills and activities varied, a strong understanding of healthcare systems and excellent communication skills were essential across all positions. The core attributes of MA professionals in pharma were defined by three MA components: 'right roles' (job responsibilities), 'right people' (reputation and skills), and 'right reward' (wages and remuneration).

Conclusions. This study is the first document analysis of MA job roles in pharma, focusing on their conceptualisation and definition. MA is an emerging profession characterised by diverse roles, varying entry requirements, and the need for collaboration across healthcare systems. The findings indicate that MA in pharma is still in the early stages of professionalisation and needs further development. To advance this evolution, developing competency frameworks, standardising job roles, and guiding curriculum design are recommended.

Introduction

Market access (MA) in healthcare is a complex and diverse concept, particularly in the pharmaceutical industry (pharma) [1–4]. Unlike typical goods influenced by supply and demand dynamics, the healthcare market poses unique challenges to the conventional economic model [1–3,5]. According to Gold [6], current frameworks for assessing access are person-based and fail to capture the complexity of the healthcare system and the varied structures of managed care organisations that integrate delivery and financing. Therefore, MA in pharma is crucial for enabling manufacturers to convey the value of their products to stakeholders before patient access. Its implications vary depending on whether it applies to private, public, or mixed healthcare systems, and the type of healthcare market organisation (centralised, decentralised, or fragmented) [1]. Effective MA demands collaboration among various stakeholders—healthcare providers, payers, regulatory bodies, and patient advocacy groups—each offering unique expertise and insights. Moreover, with the shift toward patient-centric care, companies must prioritise patient needs and outcomes in the MA process [7]. MA involves various processes to engage diverse stakeholders [8], with variations in healthcare systems across countries influencing its conceptualisation. For example, in the United Kingdom (UK), key gatekeepers include the Medicines and Healthcare Products Regulatory Agency, National Institute for Health and Care Excellence, and the National Health Service (NHS). In contrast, the US insurance system significantly influences the roles of regulatory agencies like the Food and Drug Administration and the Institute for Clinical and Economic Review [2].

Pharma, like any commercial industry, depends on profits for survival, with research and development, sales, and marketing traditionally driving success [8]. Increasing financial constraints on healthcare provision and the need for evidence to support healthcare decisions have made MA a key component of pharma. MA provides evidence related to patient needs, safety, efficacy, effectiveness, budget impact, and cost-effectiveness of technologies compared with existing treatments [9]. This involves the application of tools and methodologies such as cost-effectiveness modelling to assess value, budget impact analysis to evaluate affordability

within healthcare systems, stakeholder mapping to identify and engage key decision-makers, and healthcare system analysis to align access strategies with NHS structures and policy priorities. Consequently, pharma has started employing MA professionals, and to navigate the dynamic regulatory environment, some have established MA functions as integral parts of their organisations, though few have dedicated MA teams with well-defined roles [8]. MA is associated with delivering value for money through pharmaceutical products [10]. From the manufacturer's perspective, MA aims to maximise patient access to their products [1,10]. However, MA can be oversimplified and confused with activities like obtaining licensing, market authorisation, medical representatives gaining access to healthcare professionals, ensuring product availability in pharmacies, and selecting promotion channels. This underscores the need for clearly defined MA roles and activities within pharma [1,8–10].

Establishing a professional identity by defining roles and developing educational standards is crucial for enhancing professional status. Evaluating the roles of emerging professionals like MA in pharma, along with the practical skills and knowledge of current practitioners, can inform the necessary educational standards, ultimately enhancing the preparedness and effectiveness of MA professionals. Due to the limited primary literature on the skills and roles of MA professionals in pharma, a document analysis (DA) of grey literature was undertaken to fill this gap. This grey literature offers valuable insights into the development of MA and the identity of its practitioners. According to Bowen [11], DA is a systematic process that can complement other data sources. This study explored the roles of MA professionals within pharma in the UK, including the knowledge (theoretical and contextual understanding), skills (practical and interpersonal abilities), competencies acquired and expected (the integrated application of knowledge and skills in real-world settings), and other attributes required for an MA job.

Materials and methods

Methods

A DA of published UK MA job advertisements from pharma, NHS websites, and Google search

engine was conducted. These advertisements were public records, and did not require ethics approval [11,12], and were retrieved between February and August 2019 and updated between 1st and 31st August 2023. A job analysis template was used for this DA. Duties, tasks, and responsibilities associated with MA roles, as well as the knowledge, abilities, and skills required, were gleaned from the advertisements.

Search strategy

The search terms used were "market access jobs" and "MA jobs." The selected websites (NHS, pharmaceutical companies, Google) were deemed the most common sites for advertising MA jobs during the data collection period. The selected pharma websites included Pharmaphorum, CarrotPharma, and Pharmiweb.jobs, as they were top-ranked for advertising MA jobs during the data collection period. MA jobs advertised outside the UK were excluded.

Data extraction

An adapted template from O'Leary [12] was used for data extraction, following an eight-step framework:

1. Create a list of text to explore relevant keywords: The keywords used were 'market access jobs' and 'MA jobs.' All MA jobs advertised in the UK (in English only), regardless of hierarchical level, from entry-level to top managerial roles, were considered. Job roles in health economics and similar roles were excluded.
2. Consider how texts would be accessed: Online MA job advertisements were gleaned using a job analysis data extraction template.
3. Acknowledge and address biases (inclusion and exclusion): Eligibility criteria were set based on a preliminary cursory search. CF retrieved documents based on the eligibility criteria, and GY and CM checked the search strategy and criteria. MA jobs lacking person specification details and required skills, or outside the scope of MA, were excluded.
4. Develop appropriate skills for research: CF, a PhD candidate with work experience in MA, and the other authors (GY, EM, CM, and IO), experienced academics/researchers in research methodology, conducted the study.
5. Consider strategies for ensuring credibility: Data were obtained from reputable pharma-

ceutical companies' websites, NHS websites, and Google search. Duplicate job advertisements were removed from search results.

6. Ensure data specificity to the study's objective: Sensitive keywords 'MA jobs' or 'market access jobs' were used for data identification. Data were sourced from pre-determined relevant sources based on a cursory literature review.
7. Consider ethical issues: An exempt approval was granted by Faculty Ethics, Manchester Metropolitan University, UK, as the study was considered low-risk being an analysis of publicly available documents.
8. Explore content: A job analysis template was used in this study. Data were gleaned on the job role advertised, the website where the job was published, the date the job data was retrieved, the remuneration for the job, the job location, the required job skills, the job hierarchy, and key features or elements of the role.

Data analysis

DA is typically regarded as a qualitative analysis method [11]. Thematic Content Analysis (TCA) was employed to analyse the data. TCA was used to identify key themes across the dataset by grouping conceptually similar codes into themes. The data were quantified in terms of frequency to examine the presence, meanings, and relationships of text, codes, and relevant themes.

Results

Eighty MA job advertisements were compiled from February to August 2019 (n = 60) and updated between 1st and 31st August 2023 (n = 20) (see **Figure 1**). Three main MA components were identified: Role Advertised, Skills and Activities, and Rewards.

Role advertised

The job roles were categorised as: entry-level (44%), senior-level (15%), pricing and reimbursement (P&R) (11%), and head and director roles (30%). Entry-level roles exhibited the most variability in job titles. The entry-level role with the highest frequency was the MA consultant (29%). Senior MA roles included senior MA manager (25%) and senior analyst MA (17%). P&R roles

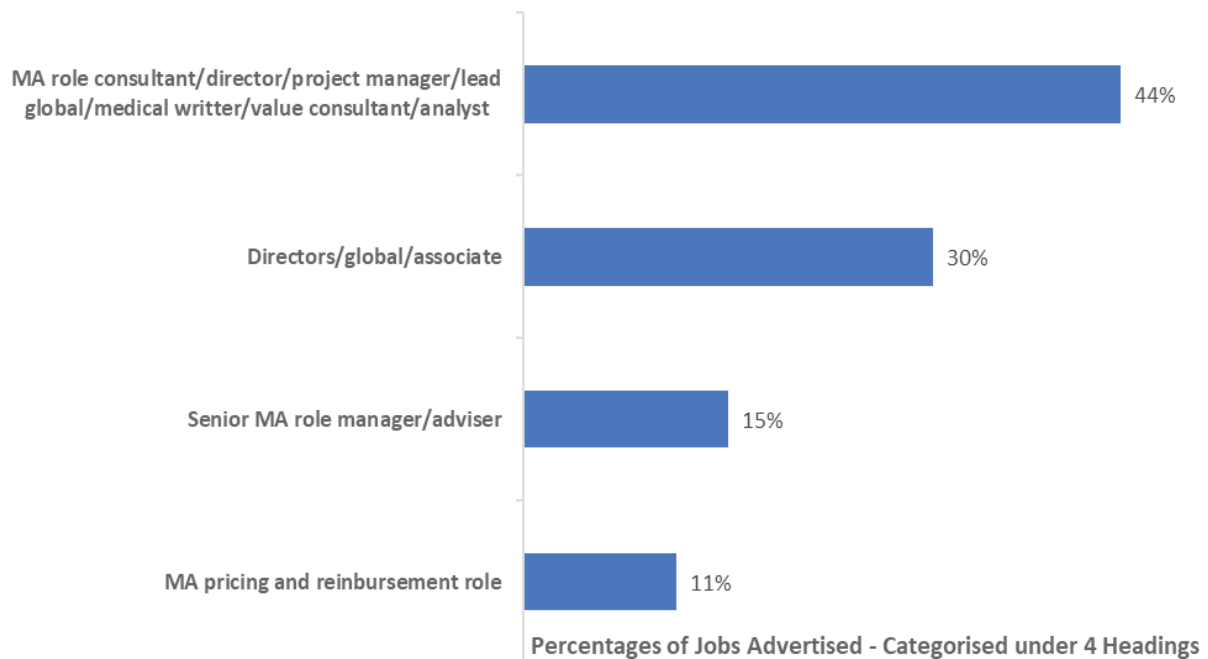


Figure 1. Total number of MA Jobs Advertised.

included pricing and MA consultant (33%) and MA and pricing specialist (33%). Head and director roles included global category manager (17%) and MA director (13%) (see **Table 1**).

Skills and activities

For entry-level roles, key skills include understanding healthcare systems and managing stakeholder collaborations (98%), and generating new business through client partnerships in MA, health economics, and pharmaceuticals (98%). Others include managing day-to-day deliverables of projects (95%), demonstrating healthcare value (95%), and communicating P&R (93%).

For senior MA roles, essential skills include ownership in resolving methodological issues like P&R (92%), effective communication to build trust and identify opportunities (92%), a strong understanding of healthcare systems (92%), and project management skills (92%).

In P&R roles, key required skills include understanding healthcare systems and managing stakeholder collaborations (100%). Generating new business through client collaboration in MA and health economics is also vital (100%). Other important skills are communicating P&R (89%) and managing project deliverables (89%).

For head and director roles, the key skills required included managing the transition from

pre-launch to post-launch and developing effective launch strategies (100%). Other important skills were team management (92%) and strong organisational and technical abilities (83%) (see **Table 2**).

Rewards

For entry-level roles, the top reward was accrue holiday (53%), followed by performance bonuses (45%) and personal development opportunities (40%). For senior roles, the most common reward was a competitive salary and bonus (£104,600.00–£209,200.00) (54%), along with opportunities to work with international professionals (46%) and career development (46%). In P&R roles, the standout reward was a care flexible spending account (99%), with a friendly work environment (88%) also noted. For head and director roles, key rewards included a challenging environment with high-performance rewards (25%) and competitive salary and benefits (25%) (see **Table 3**).

Discussion

This study investigated the roles of MA professionals within the pharmaceutical industry through a DA of MA job advertisements. Three

Table 1. Frequency distribution of all advertised roles.

Roles advertised	Frequency (%)
MA Entry-Level Role (n = 35)	
Market access consultant	10(29)
Market access manager	5(14)
Medical writer market access	4(11)
Analyst health market access	1(3)
Business development manager – health economics	1(3)
Consultant market access	1(3)
Health economics and MA project manager	1(3)
Market access analyst	1(3)
Market access editor	1(3)
National market access associate	1(3)
National MA lead	1(3)
Associate value consultant MA	1(3)
Health economics and MA graduate	1(3)
Market access and pharmaceutical sales	1(3)
Market access and project manager	1(3)
Market access and business development manager	1(3)
Payer value and patients access manager	1(3)
Business manager – HEOR (Health Economic and Outcomes Research) and MA	1(3)
Rare disease MA manager	1(3)
Senior MA Role Advertised (n = 12)	
Senior MA manager	3(25)
Senior analyst MA	2(17)
Senior MA adviser	2(17)
Market access senior analyst	1(8)
Senior global manager of MA	1(8)
Senior MA manager	1(8)
Senior manager UK MA	1(8)
Senior UK MA manager	1(8)
Pricing and Reimbursement role Advertised (n = 9)	
Pricing and MA consultant	3(33)
MA and pricing specialist	3(33)
Pricing and MA Associate	1(11)
Pricing and MA	1(11)
MA and pricing managing consultant	1(11)
MA Head & Directors Role Advertised (n = 24)	
Global category manager	4(17)
Market access director	3(13)
Principal Consultant MA	3(13)
Head of MA	2(8)
Director/Associate director of HEOR & MA	2(8)
Director international MA	2(8)
Business development head MA	1(4)
Market access VP life science	1(4)
Head MA	1(4)
Associate director, HEOR & MA	1(4)
Associate director pricing and MA	1(4)
Director MA	1(4)
Global MA director	1(4)
UK MA director	1(4)

Keys: HEOR – Health Economics and Outcomes Research; MA – Market Access; UK – United Kingdom; VP – Vice President

Table 2. Entry Level Role: Skills and Activities.

Skills and Activities	Frequency (%)
MA Entry Level Skills and Activities (n = 35)	
Understanding of different healthcare system and managing collaborations with stakeholders	34(98)
Generate new business through collaboration with clients for MA, HE, pharma, and healthcare policy	34(98)
Managing day to day deliverables of projects including time and budget	33(95)
Expertise in healthcare value demonstration including HTA, Pricing and reimbursement submissions & KPIs	33(95)
Communicating price and reimbursement and making submissions to HTA agencies	32(93)
Leadership capabilities with passion to develop others within the team	32(93)
Strategic insight, creative insight, creative mind-set, and active listening & paying attention to detail	31(91)
Record of accomplishment of strong analytical skills and been able to work with analyst on the team	31(91)
Degree and a post graduate degree in relevant fields such as MA, HE, life science and public health and PhD. Meaning degree can be BSc, MSc and PhD	30(86)
Qualitative and quantitative research including systematic reviews	29(84)
Active business and clients, stakeholder's relationship to ensure high quality deliverables	28(80)
Creating and delivery solutions for clients to inform development of value proposition through MA and medical communication	28(80)
Communication, interpersonal and management skills	26(75)
Team player, mentoring other team members with strong work ethics	25(73)
Computer and statistical analysis skills with experience of using STATA/SAS, Excel, and spreadsheet	24(70)
Global value dossier, market access tools and client deliverables	23(66)
Interpretations of clinical trials and observational studies	20(57)
Experience of working with the NHS and it goals, NICE & MA insight	8(23)
Minimum of 3 years' experience	6(16)
Fluent in English	4(11)
Willingness and ability to travel and current full driving licence	2(5)
Another European language	1(2)
Senior MA Skills and Activities (n = 12)	
Experience of taking ownership & resolving methodological problems including pricing & reimbursement	11(92)
Proven track records of effective communication to generate trust and tactics for MA opportunities	11(92)
Strong understanding of healthcare systems liaising with relevant business and external affairs & global strategy	11(92)
Project management and High understanding of HTA submissions & working independently at senior level	11(92)
Proven capabilities to represent at NICE, NHS on cross system initiatives & developing KPIs	10(85)
Excellent negotiation skills and Project management including day-to-day delivery of projects & prepare dossiers	10(85)
Ensuring that barriers to product uptake & early adoption including the use of Excel & spreadsheet	9(77)
Experience in MA role in pharma sector and in multi-disciplinary, matrix and global context	9(77)
Providing line management, mentoring and technical leadership on portfolio of projects	8(69)
Analysing data, rolling out tools, materials, and projects to drive access and drawing conclusions	7(62)
Having a post graduate qualification in scientific discipline & experience with qualitative and quantitative research	5(38)
Extremely strong written and spoken English	4(31)
MA Pricing & Reimbursement Skills and Activities (n = 9)	
Understanding of different healthcare system and managing collaborations with stakeholders	9(100)
Generate new business through collaboration with clients for MA, HE, pharma, and healthcare policy	9(100)
Communicating price and reimbursement and making submissions to HTA agencies	8(89)
Managing day to day deliverables of projects including time and budget	8(89)
Qualitative and quantitative research including systematic reviews	7(78)
Expertise in healthcare value demonstration including HTA, Pricing and reimbursement submissions	7(78)
Active business and clients, stakeholder's relationship to ensure high quality deliverables	6(67)
Creating and delivery solutions for clients to inform development of value proposition through MA and medical communication	6(67)
Team player, mentoring other team members with strong work ethics & and ability to attend medical and commercial conferences	5(56)
Leadership capabilities with passion to develop others within the team	5(56)
Degree and a post graduate degree in relevant fields such as MA, HE, life science and public health	3(33)
Record of accomplishment of strong analytical skills and been able to work with analyst on the team	3(33)
Global value dossier, market access tools and client deliverables	3(33)
Communication, interpersonal and management skills & to build professional relationship with team members	2(22)

Table 2. (Continued).

Skills and Activities	Frequency (%)
Computer and statistical analysis skills with experience of using STATA/SAS, Excel, and spreadsheet	2(22)
Interpretations of clinical trials and observational studies & performing qualitative and quantitative analysis	2(22)
Strategic insight and creative mind-set and able to create clients ready report	1(11)
MA Head and Director Skills and Activities (n = 24)	
Bringing assets from prelaunch to post launch develop through implement effective launch strategy including responses to clients' queries	24(100)
Managing and leading team of well-trained analysis and consultants on MA pathways for a variety of products	22(92)
Excellent organisational skills and technical skills including Working with MA to implement, sustain and optimise pricing, access, and reimbursements	20(83)
Develop and implement effective MA strategies ensure project management such as pharma, biotech, medical devices projects	18(75)
Responsible for strategic insight and development of HTA as set out by NICE and demonstrate initiative	18(75)
Conducting research activities in various therapy areas and initiative on clinical trials and observational studies	16(67)
Degree in life science, medical degree, health economics, mathematics, epidemiology, and Biostatistics	14(58)
Collaborating with stakeholders and ensure that the local market activities comply with regulatory agencies	14(58)
Effective building relationship with internal team and stakeholders	13(54)
Excellent presentation, communication skills including clients influencing skills, value dossier, payer value propositions	13(54)
Responsible for managing multiple projects Working with senior leaders across healthcare business unit to ensure integration	10(42)
Experience of 2 to 8 years	6(25)

Keys: HE – BSc – Bachelor of Sciences; Health Economics; HTA – Health Technology Assessment; KPI – Key performance indicator; MA – Market Access; MSc – Master of Science; NHS – National Health Science; NICE – National Institute for Health and Care Excellence; PhD – Doctor of Philosophy; SAS – Statistical Analysis System; STATA – Statistics and Data

main MA components emerged: roles, skills and activities, and rewards. These were re-labelled as the 'right roles' (job responsibilities), 'right people' (skills and activities), and 'right reward' (wages and remuneration) to align with a related scoping review on the conceptualisation and role of MA in pharma [13].

Right roles

The advertised roles included entry-level, senior-level, P&R, and head and director roles. Entry-level roles were the most common, offering opportunities to learn about market dynamics, pricing strategies, and stakeholder management [14–16]. These roles often assist with research, data analysis, and strategy development. However, the lack of consistency in job titles suggests that the profession is in the early stages of professionalisation. Compared to other professions, MA in pharma is relatively new and may be described as a 'semi-profession' [17]. This is because it currently shares characteristics of a semi-profession, such as no specific training requirement, shorter training periods, and less autonomy from supervision [17].

Many healthcare occupations have transitioned to professional status through the development of educational standards and professional certificates. For example, nursing and physiotherapy have evolved from occupations to professions [18,19]. Nursing and physiotherapy have registered titles for entry roles, such as 'newly qualified nurse' and 'junior physiotherapist,' with fixed starting pay bands, unlike MA in pharma where the starting pay point is negotiated [18,19]. Similarly, the transition to professional status for the UK pharmacy profession between 1880 and 1905 involved lower-status professionals engaging in mnemonic work to maintain professional purity and collectively mobilising to influence professional bodies dominated by higher status peers [20]. Considering that MA is a relatively new field in the pharma, Koch [21] suggested integrating MA into health economics in research and development.

The 'P&R' role was the least advertised MA role. This role requires skills and competencies in pricing and market consultation. P&R in pharma refer to establishing a price and obtaining a positive reimbursement decision for a new product

Table 3. Rewards offered for the different MA roles.

MA Entry Level Reward (n = 35)	Frequency (%)
Holidays accrued	19(53)
Performance related bonus/Bonus £21900/ Salary 40k to 73k and pension	16(45)
Personal development	14(40)
Competitive salary/statutory payment	12(33)
Working alongside talented professionals	10(28)
Other incentives	9(26)
Healthcare	9(26)
Flexible working including flexible working abroad – hybrid	7(21)
MA Senior Role Reward (n = 12)	
Excellent bonus/competitive salary 104,600.00 – 209,200.00	7(54)
Opportunity to work alongside international & group of talented professionals and personal development	6(46)
Career development opportunities and enhancement	6(46)
International experience of working with other companies such as San Francisco & Singapore and top 100 companies	2(16)
Excellent health & wellness programmes such as Yoga, meditation & summer day out	1(8)
MA pricing & Reimbursement Rewards (n = 9)	
Care and flexible spending account	9(99)
Incentives & friendly work environment	8(88)
Competitive compensation package/Bonus incentive	6(67)
Fast paced career progression	3(33)
Opportunity to develop internal engagement including line management role	2(22)
Ability to manage multiple work streams	2(22)
Retirement/Salary range \$104,600.00 – \$209,200.00	2(22)
Medical, dental insurance	1(11)
MA Head & Vice President and Director & Associate Reward (n = 24)	
A challenging and fun environment with High performance reward system	6(25)
Competitive salary and benefits	6(25)
BUPA health Insurance including partners and children cover	5(21)
Company shares option scheme including Health insurance	5(21)
Employer matched pension scheme 5%	5(21)
Free gym membership	5(21)
Clear and solid foundation for future growth including excellent career prospect	4(17)
Cycle to work scheme	1(4)
Excellent long-term position	1(4)

[8,9,21,22]. P&R are crucial in MA because they determine whether pharmaceutical products can reach patients and be financially viable [23]. Considering that P&R measures affect the capacity of pharma to sell their products, the right person with competence and experience is needed for these roles. Berndt and Newhouse [23] highlight how federal legislation in the United States, insurance systems, and distribution logistics significantly impact drug prices and utilisation, thus requiring effective P&R strategies to ensure that pharmaceutical products are accessible to patients while maintaining the economic sustainability of pharmaceutical companies.

The MA head and director roles were the last in the category. The 'global category manager'

was the most frequently advertised job role in this category. Holders of this role need deep industry knowledge, understanding of market trends, research and data-driven insights, and robust payer relationships [14]. Overall, there were different 'right roles' with diverse tasks, yet all aimed towards ensuring patient access to pharmaceutical products. MA roles are not uniform and often vary significantly depending on therapeutic area, product lifecycle stage, and organisational context [24–26]. For example, MA professionals in oncology may need to engage more deeply with accelerated access schemes, orphan drug policies, and complex evidence packages compared to their counterparts in primary care, where the focus is often on cost-effectiveness and the

overall impact on the population [25,27–28]. Additionally, responsibilities change throughout the product lifecycle: pre-launch roles generally prioritise early value strategy, evidence generation, and stakeholder mapping, while post-launch roles focus on maintaining access, managing real-world evidence (RWE), and adapting to shifting payer requirements [29–31].

The roles and competencies identified in stakeholder engagement, Health Technology Assessment (HTA) navigation, and evidence communication are particularly relevant to real-world challenges. These include overcoming local formulary restrictions by creating tailored value propositions, utilising RWE to support reimbursement in areas with limited data and negotiating managed entry agreements that align clinical uncertainty with payer risk-sharing mechanisms [32–35]. The type of employer also shapes role expectations; large pharmaceutical companies may offer more specialised MA functions with access to internal health economics and outcomes research (HEOR) and policy teams, whereas consultancies often require broader, cross-functional expertise to support multiple clients across diverse markets. These contextual differences underscore the need for flexible, role-specific competencies within any framework aimed at professionalising MA [36–38].

Right people

The theme 'right people' refers to MA professionals. Employing or outsourcing MA roles to the right people is crucial for achieving patient access to products. A candidate's reputation in skills and experience is highly desirable to pharmaceutical employers. MA professionals need experience in different therapy areas and exposure to health economics.

MA professionals handle various responsibilities, including crafting the product's value proposition, conducting health economics and outcomes research, and managing price negotiations. They also engage with stakeholders like healthcare professionals and patient advocacy groups [8,9,21]. The findings show that understanding different healthcare systems and managing collaborations with stakeholders were the most commonly required skills. These requirements resonate with the field realities of an MA professional in pharma.

Other essential attributes required include external stakeholder engagement, such as mapping and prioritising decision-makers across NHS structures, tailoring value messages to payer needs, and facilitating advisory boards or consultations with patient groups. Additionally, strong data analytics capabilities are essential. This includes interpreting RWE, conducting budget impact analyses, and modelling cost-effectiveness to guide pricing and access strategies [39–42]. In addition to traditional competencies, modern MA roles increasingly require proficiency in digital tools and data-driven approaches [43–45]. Thus, the integration of RWE, patient-reported outcomes, and AI-enabled analytics is transforming how value is demonstrated and communicated [43–45]. For instance, RWE supports the validation of value post-launch [46,47], while patient-reported outcomes capture patient-centric outcomes that are critical for decision-making [48,49]. Thus, MA professionals are crucial to product launch success because they enable priced and well-timed product fulfilment for appropriate patients.

Additionally, the use of AI-driven tools enhances forecasting, segmentation, and stakeholder targeting in MA [50,51]. These capabilities are becoming essential for MA professionals for navigating complex access environments and aligning with the evolving expectations of payers. Also, the changing regulatory landscape driven by digital health innovations, the growing use of RWE, adaptive licensing pathways, and the transformation of HTA processes require MA professionals to develop new skills. These skills include the ability to interpret and apply RWE in regulatory and reimbursement submissions, navigate digital health policy frameworks, and engage with adaptive HTA models that emphasise early access and iterative evidence generation. Consequently, regulatory literacy, data governance, and cross-functional collaboration are becoming essential components of the MA skillset [52,53].

Furthermore, the MA strategy entails providing clinical and economic evidence and bargaining with healthcare access stakeholders. A combination of regulatory frameworks, market dynamics, and innovation pressures shapes the pharma's financial and policy landscape. Companies must navigate complex pricing and reimbursement

systems, which vary significantly across countries and impact drug accessibility and affordability [54].

The job adverts indicated that MA professionals must interpret and understand the healthcare system and collaborate with other professionals to achieve organisational goals. Entry-level MA professionals are typically field workers who ensure better patient access to pharmaceutical products. Usually, MA professionals in pharma play a key role in marketing and managing companies by enhancing interactions with various business and non-business actors to ensure MA for ethical drugs. These relational interactions are critical in navigating the regulatory environment, acquiring knowledge, and establishing legitimacy, viewed from an industrial marketing perspective [55]. Other roles requiring core skills and competencies include negotiating price/reimbursement and obtaining authorisation for new products [56]. Guercini et al. [57] stressed that conceptualising MA in pharma should involve engaging the company in a network of relationships with other actors to sustain a national healthcare system.

No specific academic requirement was necessary for an MA entry role, other than holding a degree in a broadly relevant field. Instead of needing skills specific to MA jobs, candidates were expected to possess a transversal skillset that applies across various backgrounds and contexts [58,59]. This suggests that persons with varying academic backgrounds, especially in life sciences, can work as MA professionals. This finding aligns with a related scoping review [15] and another report [56]. Currently, MA roles increasingly reflect the 'T-shaped' model, where professionals combine deep expertise in MA (vertical) with broad, cross-disciplinary skills (horizontal) essential for navigating complex healthcare challenges [60]. The multidisciplinary nature of the knowledge and skills possessed by these professionals enables them to have unique insights into their tasks [61].

The lack of a restricted academic background to qualify as an MA professional in pharma is a testament to its semi-professional status. Due to the diverse skill requirements and varying activities for MA entry roles, there is a need to establish MA functions, especially in emerging markets, where the complex and dynamic healthcare landscape confounds product approval and

uptake [3,8,58]. Adopting a conceptualised framework could help establish MA as a profession [8]. Batt, Tavares, and Williams [62] emphasise that competency frameworks are crucial for defining workforce attributes, facilitating professional mobility, and assessing expertise. The authors emphasise the need for tailored development processes for competency frameworks in healthcare professions to ensure valid outcomes.

Also, Fallis et al. [63] advocate for the adoption of more structured and contextually appropriate approaches to the development and reporting of competency frameworks, in response to the methodological inconsistencies identified across the existing literature. Thus, as is familiar with other emerging fields, professionalisation of MA requires the establishment of formal structures, including accreditation bodies, certification pathways, and standardised curricula [64,65]. For instance, the European Market Access University Diploma in France, and organisations like the Market Access Society, International Market Access Society, and the International Society for Pharmacoeconomics and Outcomes Research, a leading global professional society for HEOR, which plays a central role in MA, provide recognised training and certifications. Incorporating these trainings into career pathways, along with university-affiliated programmes and industry-led training, could help establish a formally recognised and regulated MA profession.

Right reward

The MA component of "right reward" encompasses remuneration, salary, wages, and other entitlements. The study found that remuneration varied across different MA roles. Only a few job adverts specified exact salaries, with most emphasising "competitive benefits" or a "competitive compensation package." The most frequently mentioned reward was the ability to accrue holiday, suggesting a flexible working pattern. Senior MA roles offered a competitive salary range between £104,600.00 and £209,200.00. P&R roles were associated with a "care flexible spending account," allowing employees to set aside pre-tax money to cover healthcare and dependent care expenses. Head and director roles were linked to high-performance reward systems and competitive salary and benefits, indicating that employers value and recognise exceptional performance.

Rewards are typically tangible or transactional, often fixed and lacking personalisation, with a focus on outcomes rather than employee behaviour. The literature distinguishes between financial rewards, such as raises, bonuses, and benefits, and nonfinancial rewards, like autonomy, flexibility, and recognition [56]. Offering encouraging rewards and recognition can help retain employees in the long term, enabling them to advance in their careers. Studies among other health professionals have shown that remuneration is a strong predictor of job retention and satisfaction [18,19,64]. Specifically, organisational commitment, job satisfaction, and employee retention in the pharma industry are significantly associated with compensation and remuneration [65,66].

This study represents the first DA of MA job roles aimed at understanding how the MA in pharma is conceptualised. The findings highlight the necessity for defining professional roles, skills, and knowledge to meet the diverse and evolving demands of the MA in pharma. These insights can inform the development of educational standards for a field that currently lacks them, better preparing individuals for industry challenges and enhancing healthcare quality.

However, this DA is limited by its exclusive reliance on publicly available job advertisements from selected UK-based websites, which may introduce sample bias and restrict the generalisability of findings beyond the UK context or across different recruitment platforms. Moreover, by excluding international roles, the analysis does not capture regional variations in MA roles, competencies, regulatory expectations, or healthcare system structures that shape the profession globally. Therefore, future research should incorporate broader geographic and platform diversity to enhance the applicability and relevance of findings across different contexts. A further limitation of this study is the temporal distribution of data, with 60 of 80 job postings from 2019 and only 20 from 2023. This imbalance may limit the study's ability to capture recent shifts in MA roles following COVID-19 and amid ongoing regulatory changes. This study focuses on advertised MA roles in the UK, and does not incorporate the perspectives of hiring managers, MA team leads, or HR professionals who define these roles in practice. Future research could incorporate these perspectives to enhance document-based analyses.

Conclusions

A Master's in Pharmacy is an emerging profession with heterogeneous job roles and titles, variable entry requirements, and requires a demonstrable ability to understand and collaborate in different healthcare systems. The findings suggest that the MA in pharma is in the early stages of professionalisation and needs further development. To advance this evolution, developing industry-wide competency frameworks, establishing standardised job taxonomies, and creating educational guidelines to inform MA curricula and training pathways are recommended.

Disclosures

Authors' contributions

Conceptualisation and methodology – C.F., G.Y., E.M. and C.M.: Data curation – C.F., G.Y.: Formal analysis. C.F., G.Y. and C.M.: Writing – Original Draft. C.F., G.Y., E.M., I.O. and C.M.: Supervision – G.Y., E.M., I.O. and C.M.: All authors read and approved the final version of the manuscript.

Ethical approval, registration

An exempt ethical approval was granted for this study by the Faculty Ethics at the Manchester Metropolitan University (Registration number -1474, approved on 22/10/2024).

Conflict of interest statement

The authors declare no conflict of interest.

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