Identifying influential stakeholders in secondary care organisations is critical to the development of a modern account planning strategy, particularly at a time of heightened emphasis on this sector.

With companies increasingly vying for limited detailing space or access to specialists, influence network maps provide a valuable resource support tool for helping to determine key customers.

Stakeholder influence mapping in secondary care

In an increasingly competitive environment, Nicola Cobbald and Matthias Röhle consider the value of influence mapping in generating an integrated view of prescribing and non-prescribing entities within a secondary care unit, and their influence on each other.

Nicola Cobbald is a Senior Consultant in the IMS Consulting & Services practice. As an experienced researcher with an industry background in business and market analysis, Nicola helps clients to address issues in pricing and benchmarking, market evaluation, sales force effectiveness (which includes devising hospital strategies) and also with forecasting key therapy areas globally across Europe, the US and Japan.

Matthias Röhle is an Engagement Manager in the IMS Consulting & Services practice. He has a strong background in the pharmaceutical industry and extensive experience of strategy and concept development in sales force effectiveness. The focus of his projects has been, for example, segmentation and targeting in primary and secondary care, build up and re-organisation of sales structures, promotional effectiveness and portfolio optimisation, among others.
KEY CONSIDERATIONS

Not all stakeholders with significant influence on treatment and prescription decisions in secondary healthcare organisations necessarily have a high prescription potential. In fact, many so-called ‘non-traditional’ stakeholders, such as hospital pharmacists, can often be associated with relatively low economic potential, yet are key to formulary board decisions, supporting prescribers with day-to-day advice on appropriate treatment options. It is important not to underestimate the influence of this kind of stakeholder on decision making and prescribing within a healthcare organisation. Thus, key individual customers need to be profiled in terms of both the volume of treatment initiations and prescribing choices, and the range and level of their influence on other traditional and non-traditional stakeholders.

The process outlined in Figure 1 (above) provides a proven framework for setting up and mapping influence networks, with a view to improving customised action plans and tailored messaging strategies. The four stages of the process are explained in detail in the next four sections.

1. UNDERSTAND THE TREATMENT PATHWAYS

The range and level of influence from a single individual (and therefore the structure of the entire map), may vary by drug manufacturer, therapy area or product. For this reason, mapping influence networks in a secondary care organisation calls for careful consideration upfront about the most appropriate topic for the map.

In the case of therapy area or product-based influence maps, a solid understanding of the treatment pathways within the organisation is a good place to start. With this knowledge it will be possible to determine what type of stakeholder is important for treatment decisions. Treatment pathways for patients with rheumatoid arthritis, for example (often being diagnosed and treated by the GP before referral to a specialist or hospital care unit), are different from those of cancer patients (possible inter-hospital referrals) or myocardial infarction patients (initially treated in A&E and followed up by GP) and therefore require different people in the therapeutic decision-making process.

Figure 2 (right) illustrates a generic treatment pathway and the stakeholders (including in this case, institutions) that are important in patient management and treatment decisions.

The framework for creating disease-specific treatment pathways is based on answering four key questions:

1. Who are the patients, and what is their particular disease?
2. How severe is their disease; what is their typical diagnosis and treatment ‘history’ in primary and/or secondary care?
3. Which stakeholder groups in the healthcare organisation are involved in treatment decision making for this patient type?
4. How are these stakeholders affected by internal and external influencers and/or treatment guidelines?

2. DEFINE RELEVANT STAKEHOLDER ROLES AND INFLUENCE

Patient profile and treatment pathways help to determine the typical stakeholder groups involved in therapeutic decision making. However, the specific role of each individual in the treatment decision will differ. The individual who prescribes the treatment, for example, may have had little influence on the decision to use it. Understanding the detail of these roles is key to defining relationships and impact dynamics in the organisation.

The degree to which a person fits in certain role categories is partially determined by personal behaviour, as well as the opportunities and responsibilities they encounter in their job role. Figure 3 (right) provides an overview of some of the main categories, with the proportion of each varying to some extent according to the role of the individual.
2. Generic treatment pathway and possible internal and external influences on therapeutic decision making and product selection

- Government
- Health authorities
- Treatment guidelines
- Patients
- Members of formulary committees
- Advisory boards/key opinion leader
- Hospital pharmacists
- Medical directors
- Therapy specialists
- Prescribers
- Nurses

3. Illustrative examples of stakeholder roles in a secondary care organisation

**Decider?**
- **Definition:** Decides on patient treatment and therapy as single person or active part of a decision committee
- **Examples:** Active member of hospital formulary committee, writes treatment protocols, seen by others as a decision maker in the organisation

**Influencer?**
- **Definition:** Influences decider through proactive, passive or subtle transfer of points of view, thoughts or behaviour
- **Examples:** Active member of an advisory board, able to provide advice that might lead to a validation or a change of treatment decision

**User/Prescriber?**
- **Definition:** Uses-prescribes the product after patient has been diagnosed and treatment decision has been taken.
- **Examples:** User of products of the selected product class, user of a specific brand

**Initiator?**
- **Definition:** Initiates therapy in the organisation, then releases/refers the patient to GPs or other specialists
- **Examples:** Initiator can prescribe him/herself, or just be a recommender
The following list of key questions (which is by no means exhaustive) provides some guidance in understanding the true potential of an individual in the influence network map, by assessing the nature of a single stakeholder’s influence:

1. Is this person considered an expert who influences others regarding therapy decision or drug selection?

2. Does he/she provide advice that might lead to a validation or change of treatment decision?

3. Does he/she influence others through practical knowledge about the way a certain product is used (eg, regarding compliance issues)?

4. Is he/she a member of a therapy area advisory or formulary board, and/or a key opinion leader?

5. Does he/she have the ability and the charisma to influence others?

Thus, when building influence networks it is important to use a common and agreed specification of the type, the range (eg, impact on the direct reports in a departmental team of physicians vs impact across several departments in a hospital) and the level (eg, moderate or strong) of influence.

3. MAP AND INTERPRET INFLUENCE NETWORKS WITHIN THE ORGANISATION

Collection of influence data: An understanding of which stakeholders in the organisation are important to the therapeutic area being considered enables these individuals to be profiled and an influence network map developed.

For the purposes of data collection, it is necessary to establish a framework which captures influence from, and influence on, each individual. For example, the level of influence may be reflected using a 5-point scoring system, where 0 means no influence and 4 represents the strongest level of influence. Figure 4 (above) illustrates how this can be done.

In the example shown, Stakeholder A influences B, C and D, with the greatest amount of influence on C (score of 3 out of 4). The fact that C exerts a reciprocal influence on A (albeit to a smaller extent) can be taken into account by assigning an overall influence of 2 in the direction of Stakeholder A to C.

Influence network data is typically collected by using manufacturer resources (sales force, key

It is important not to underestimate the influence of the ‘non-traditional’ stakeholders on decision making and prescribing within healthcare organisations.
account managers, marketing), or an external market research company. It is generally optimal for a pharmaceutical company to use its own resources – based on it having a stronger knowledge of its customers – which in turn allows a higher quality of input, better acceptance of the results and lower costs compared to commissioning external research. At the same time, these advantages must be weighed up against the training investment required and additional workload for the employees in the field.

**Influence network mapping in secondary care organisations:** Influence network maps illustrate the influential relationships between traditional and non-traditional stakeholders. At their core, these maps consist of nodes representing individuals, characteristics (such as titles, roles, etc) assigned to the individuals, and connections depicting the direction and strength of influence between them. Typically, the following three parameters may be identified at a glance:

1. **Who influences whom?** A visual illustration of the influence network within the organisation. Generally, the larger the number of connecting lines emanating from a particular individual, the broader their range of influence.

2. **Extent of influence:** The strength of influence between individuals is usually indicated by the size of the lines connecting one individual to another. In case of bi-directional influence (ie, where two stakeholders influence each other), it is important to decide (depending on the complexity of the map) whether to show both effects or just the total effect representing the difference between the two levels of influence.

3. **Range of influence:** The range of influence may vary from having a limited impact on the direct reports in a departmental team of physicians, for example, through to having a multi-level impact across several departments.

**Figure 5 (below)** shows an output example generated from mapping the influence network within a smaller hospital. Here some individuals (such as the head of department) have a greater range of influence within the hospital than others (such as the medical director). In addition, the degree of influence is different; for example, whilst the ward physician influences fewer people overall, his influence is generally stronger than that of the head of department.

In this case, the influence network mapping results have been crossed with data on the personal attitude towards drug manufacturer.
the pharmaceutical company, or the considered product in particular, in order to identify new routes of access to previously inaccessible individuals.

For example, the head of department and the hospital pharmacist are influencing a stakeholder who is an opponent of the drug manufacturer. By leveraging these relationships, access to the opponent may be improved.

**Personal attitude:** The typical definition of personal attitude, (with consideration for whether the product in question is currently on formulary), can be tailored to the specific needs of a project objective. From the perspective of a key account manager or sales representative all three types of people can be categorised as follows:

- **Advocates:** These are the individuals who are typically on your side – they like you, your products or your company. They may offer support and guidance that allows you to access other individuals or to sway the opinion of neutral or opponent stakeholders. Usually, they are allies in the hospital who can help you sell your product there or secure its place on the formulary.

- **Opponents:** These are the individuals who do not like your company, your products or you personally. They prefer to work with other companies and give preference to the inclusion of their products in the hospital or formulary list. Their reluctance to see representatives from your company means that opponents are frequently hard to access and therefore difficult to convince directly.

- **Neutrals:** These are the individuals who have no particular view of your company or product. As a result, they will not negatively influence your position with others but neither will they act in your product or your company’s favour.

Influence network data is typically collected by using manufacturer resources (sales force, key account managers, marketing), or an external research agency.
Leading companies are already recognising the benefits of analysing influence networks and defining suitable profiling criteria to understand the relative importance of particular individuals and the nature of their influence over others.

Figure 6 (left) shows a further example of the mapping process, this time in a university hospital, with a focus on the influence of the microbiology department. In this case (hospital bacterial infections e.g., following surgery), both clinical microbiologists influence many doctors in other departments of the institution.

Although, in this particular case study, these individuals do not usually prescribe directly, this illustration highlights the value of profiling and identifying these ‘non-traditional’ stakeholders as key advisers for appropriate treatment decision making in the healthcare organisation.

Both examples demonstrate the importance of influence network maps in providing a single view of the overall organisation to better identify important groups that may otherwise go undetected. They then form a basis for deriving individual target plans for institutions, showing which departments contain the most influential stakeholders and which individuals are the key priorities for outreach by the pharmaceutical company.

4. REFINE CUSTOMISED ACTION PLANS AND TAILORED MESSAGING STRATEGIES

Mapping influence networks within secondary care organisations is a meaningful tool for better understanding customer dynamics, no more and no less. Influence network mapping alone will not help to identify and target healthcare organisations. However, when used within the hospital targeting framework, it will serve as a useful means for prioritising and allocating investment decisions and developing customised messaging strategies. This is especially important for those non-prescribing stakeholders who are often not recognised sufficiently due to their relatively low economic potential:

- Non-prescribing yet influential stakeholders can now be identified and targeted more effectively
- Stakeholders with a neutral or negative attitude to the product/company can be identified.
- Relationships with advocates may be further developed and leveraged as appropriate to develop advocacy in neutral and opponent influential stakeholders.

VERSATILITY OF INFLUENCE NETWORK MAPS

Influence network maps can hold a variety of information about individual stakeholders. Often, the true benefits of the map are realised when information is structured in a meaningful way and is not limited to influence only.

- Many software solutions offer the possibility to extract ‘sub-maps’ consisting of single departments in a big hospital, for example, or to ‘isolate’ single stakeholders in order to visualise all connections of this person. This enables the user to detect important relationships and to more easily interpret influence networks.

- Combining influence data with information on personal attitudes (e.g., towards the drug manufacturer or specific products under consideration – see Figure 5, page 5) helps to determine new routes of access to previously inaccessible individuals. Existing relationships with advocates can be leveraged to approach neutral and opponent stakeholders within the advocate sphere of influence.

- Crossing influence network analysis with promotional activity data may highlight individuals (with either significant influence over a key individual or the broader organisation) who have not been sufficiently targeted before, thus identifying missed opportunities.

Used within the hospital targeting framework, such mapping will help prioritise and allocate investment decisions, and develop customised messaging strategies.
Common mapping software can easily plot around 200 individuals in a single map. However, the user should carefully consider the level of added benefit in creating a map of this size and complexity, and may find more value in simpler maps, containing more information on fewer, but relevant key individuals.

3. **Keep it simple and interpretable.** Common mapping software can easily plot around 200 individuals in a single map. However, the user should carefully consider the level of added benefit in creating a map of this size and complexity, and may find more value in simpler maps, containing more information on fewer, but relevant, key individuals.

4. **Structure the map, and build ‘sub-maps’ if necessary.** Sub-maps, eg. depicting individuals in key departments only, rather than the entire hospital, can help to visualise and better understand the network structure. These maps are also helpful in showing influential trends within hospitals on a national level.

Keeping these key considerations in mind, influence network mapping is a meaningful complement to finding the route to high value customers in the competitive secondary care environment [Röhle, Cobbald, PM Europe, 2007], and thus represents a powerful tool to support customer-oriented sales and marketing strategies.

To learn more about the way that IMS can help you improve sales in secondary care in your company, please contact Nicola Cobbald at NCobbald@uk.imshealth.com or Matthias Röhle at MRoehle@ch.imshealth.com