A PATIENTVIEW REPORT

NHS Electronic-Booking Technology

—*Getting it Right for Doctors and Patients*

Summary of results of a PatientView Workshop

held at the

Microsoft Technology Centre
Microsoft Campus
Reading

Sponsored by:
EDS / A. T. Kearney

July 2003

Contact details

PatientView
Address: Spinney Court, Plaish, Shropshire, SY6 7HX, UK
Tel: +44-(0)1694-771-863
+44-(0)1694-771-859
Fax: +44-(0)1694-771-803
Email: info@patient-view.com
Internet: www.patient-view.com

PATIENTVIEW

PatientView, an independent research and publishing organisation founded in 2000, provides valuable information about patient attitudes on healthcare delivery and on disease-based issues worldwide. PatientView helps build a consensus between patients and others involved in healthcare. Many of the organisation's projects are conducted in partnership with patient groups.

Copyright
© 2003 PatientView Ltd. All rights reserved. This publication is the property of PatientView Ltd and no part may be reproduced without permission. The report, or any part of it, must not be passed on to any third party without the express permission of PatientView Ltd.

NHS Electronic-Booking Technology:

Getting it Right for Doctors and Patients

A report on a Workshop held at
The Microsoft Technology Centre
Microsoft Campus, Reading
Monday, July 14th 2003

Authors: Angela Hayes, Jeanette Marchant,
Alexandra Wyke
Editors: Clive Nead, Alexandra Wyke

July 2003

Contents

Letter from the editor

About the sponsor and host

Executive summary

SECTION ONE:
Introduction

SECTION TWO:
Break-out session for managers and clinicians

SECTION THREE:
Break-out session for patients and patient representatives

SECTION FOUR:
Some further thoughts

APPENDICES

Letter from the editor

PatientView has, since its inception, maintained a concern with medical technology. For example, in March 2001, PatientView helped organise the *Anglo-Japanese Healthcare Conference* at the Department of Mechanical Engineering, Imperial College, London. For this reason EDS / A.T. Kearney invited PatientView to organise a Workshop on the subject of the NHS electronic booking technology. We were delighted to take up the project, since we believe that EDS / A.T. Kearney is one of the few major players in this field to consider the patient dimension. Our company also hoped that our perspective on patients could help EDS / A.T. Kearney achieve the goal of defining the optimum IT packages. PatientView would like to extend its thanks to EDS / A.T. Kearney for sponsoring the event, which we believe was a great success; and to Microsoft for hosting the venue at its technology centre in Reading. Our personal thanks also go to Michael Dale and Patricia Tomasiewicz of EDS for helping facilitate the event; to Gareth Hall and Kirsten Bodley of Microsoft and EDS respectively for all their valuable input; and to Joe Gherardi and Dean Arnold of EDS / A.T. Kearney for supporting the idea that patient views do count. Lastly, PatientView would also like to applaud the effort of its own team, notably Jeanette Marchant and Angela Hayes, who helped make the Workshop happen.

Clive Nead
Editorial director
PatientView
July 2003

About the sponsor and host

About the sponsor: EDS / A. T. Kearney

Clients in all types of manufacturing and service industries exploit the innovative IT programmes of EDS. Typically, EDS is commissioned to improve the value of client services. EDS also helps clients find revenue and cost opportunities within their own businesses. To enhance its research efforts, EDS maintains a global network of fourteen Technology Laboratories and Innovation Centres, all with a different focus and objectives. Some of these facilities specialise in R&D for specific technologies. Others concentrate on providing skills to bolster the creation of an innovative culture with clients. EDS employs numerous acknowledged thought leaders and experts, who bring ideas and experience to the task of formulating IT solutions for clients. Additionally, EDS accesses a broad external network of world-class experts known as the *Community of Thought Leaders*, some of whom are from academia. This latter group, over 700 strong, aids EDS in its strategic and innovative thinking. The community creates intellectual capital, acts as change agents (both within EDS and its clients), and supports EDS client engagements. A. T. Kearney, the high value-added management consulting subsidiary of EDS, achieves the same results for a similar portfolio of clients. When A. T. Kearney is engaged, it boosts the innovative capability of the clients themselves—by developing the creative urge within people, establishing networks, or instilling a culture of innovation.

About the host: Microsoft

Microsoft creates business solutions through the innovative deployment of technologies. As the world's largest software company, Microsoft can call upon formidable resources in the search for innovation. In the UK, Microsoft employs about 1,500 people in London, Cambridge and Reading. Microsoft works closely with healthcare organisations in every continent. Microsoft's dedicated UK, EMEA and Global Health Team focus on future insights and the potential of technology in the healthcare setting. The company is committed to driving the overall industry agenda, and participates in many of the organisations that decide Industry Standards. Being intimately involved in the evolution of online commerce, Microsoft is today responsible for implementing many online services of direct relevance to the healthcare world. These services include MSN (for individuals), and Bcentral (for businesses). Microsoft also provides specific functional Web services (such as passport protection for security verification).

Executive summary

1. The July 14, 2003 Workshop

On July 14th 2003, PatientView, an independent research and publishing organisation, managed a small Workshop with the support of the major partners in Carepoint, an electronic-booking system for in-patient and out-patient referrals. The partners include EDS / A. T. Kearney, iSoftRevive, CAS Services and Microsoft. Workshop attendees were asked to assess two referral procedures: end-to-end booking (referral made in a GP's office); and booking via the Booking Management Service (BMS), a call centre with access to Carepoint.

2. The participants

There were 12 Workshop participants drawn from the entire spectrum of healthcare stakeholders, including GPs, specialists, NHS healthcare managers, patients and patient representatives. All the participants were familiar with email and Internet booking of airline/cinema tickets. But a significant number of attendees (mostly patients and their representatives) had no experience of electronic communication systems within the NHS. For this reason, the Workshop assumed no knowledge of NHS IT reforms.

3. Objectives of the Workshop

The main objective of the Workshop was to obtain feedback from major healthcare stakeholders on the Carepoint technology; to inform the "testing solution " prior to the technology submission for National Accreditation. Attendees were asked to focus on the look and the feel, ease of use, intuitiveness, the benefits and challenges of the Carepoint system.

4. General feedback

All the Workshop attendees thought the event was an excellent idea and that they had been asked to be involved. Patient and patient representatives believed that this was the first time they had been invited to comment on any technology solution offered by suppliers to the NHS. The attendees thought that the Carepoint system would meet government objectives, although all felt that the technology could be improved.

5. The professional group

At the end of the session the professional group were asked to list their most important findings. The top three findings included:

- *The Carepoint's system ease of use meant that electronic-booking referrals could be managed by receptionists or patients in the GP practice.*
- *The Carepoint system could benefit from a more friendly interface with the flexibility to meet the needs of different users and patients;*
- *The Carepoint's convenience could encourage patients to self-refer.*

6. The patients and patient representative group

The patient and patient representative groups top three comments included:

- *The system needs to be well piloted, tried and tested.*
- *Resources [and clear protocols] are needed to ensure good implementation, e.g., people, PCs, training.*
- *The system should capture the special needs of patients, whether they are chronically ill, have impaired vision, of different ethnic origins and cultural biases (for quality referrals).*

Section 1

Introduction

This section of the report discusses the why and how the July 14 2003 Workshop was organised.

1. Why the Workshop was organised

- **Viability testing is an important process in the creation of any technology**

Relatively few if any UK studies have allowed patients, clinicians and managers to examine, compare and contrast (at pre-launch stage) the information technologies to be implemented in the NHS.

- **To improve the chance of the technology succeeding**

If users are given a chance to shape healthcare technologies, these communities are less likely to oppose the adoption of the end-product.

2. How the Workshop was organised

- **Administration, sponsors and hosts**

On July 14th 2003, PatientView organised a Workshop entitled "*NHS electronic – booking technology: getting it right for doctors and patients*", where healthcare stakeholders were invited to assess the Carepoint technology. The event was sponsored by EDS / A.T. Kearney, hosted by Microsoft and supported by other members of the Carepoint consortia, including iSoftRevive and CAS Services.

- **The objectives**

There were two main objectives. Healthcare stakeholders were able to learn about the Carepoint system. And secondly, the Workshop wanted to incorporate attendees viewpoints in the "testing solution" prior to the technology's submission for National Accreditation. The attendees were asked to focus on the technology itself, to enable EDS and partners gain a deeper understanding of the requirements of clinicians and patients regarding ease of use, speed of use, and the user interface.

- **The participants**

There were 12 participants in all: GPs, specialists, managers, patients and patient representatives. [A full list of attendees is to be found in the Appendices]. In addition representatives were present from the Carepoint consortia and PatientView to help facilitate and observe the event. A mini-survey [the mini-survey can be found in the Appendices] of the attendees prior to the Workshop revealed they were mostly IT literate. However, not all were familiar with the proposed electronic-booking systems. For this reason the Workshop assumed no knowledge of NHS IT reforms.

- **The logistics**

The attendees were given a short presentation on the background to the Workshop and a scripted demonstration of the Carepoint technology for two scenarios: end-to-end booking; and booking via a call centre using the Booking Management Service (BMS). [The steps involved in the two scenarios can be found in the Appendices]. Key features highlighted in the demonstration included:

© 2003 PatientView Ltd

1. Availability of appointments
The "cache" enables the GP and patient to have a near real-time view of available appointment slots. It allows the patient to identify an acceptable date and time for an appointment. When a suitable slot is chosen, then the booking system looks in real time whether or not the slot is still available by checking the relevant hospital trusts' Patient Administration System (PAS). This two-stage process avoids excessive searching of individual PASs for suitable slots, when the patient makes his/her selection. If the process was done in a single step, the hospital PAS would not be able to cope with the volume of enquiry traffic and specialists might not be able to retain complete control over appointment slots.

2. Use of the Internet
Carepoint gains flexibility by being run using the Internet, not through the GP's own computer system.

3. Integration with the GP electronic medical record system
Carepoint can integrate clinical information with the GP's own databank of patient records. Referral letters and free text may be attached to the electronic booking form.

4. The appointment prescription
When patients choose to defer appointments they are supplied a prescription entitling them to a referral, as agreed with the GP. The prescription carries a Unique Booking Reference Number (UBRN), which the patients quotes when booking their own referral via the BMS.

© 2003 PatientView Ltd

Section 2

Break-out session for managers and clinicians

This section of the report focuses on the results of the professional breakout group, which numbered six participants: including GPs, consultants or NHS managers, as well as PatientView and EDS representatives and facilitators.

1. Most important findings

At the end of the session, the attendees in the professional group were asked to list the most important findings from the break-out session. These were:

- The Carepoint system's ease of use meant that electronic-booking referrals could potentially be managed by receptionists or patients in the GP practice;
- The Carepoint system could benefit from a more friendly interface with the flexibility to meet the needs of different users and patients;
- The Carepoint system's convenience could encourage patients to self-refer;
- The Carepoint system needed to clarify at what point specialists (and their administrators and team) become involved in the referral process; and
- Technology is not an end in itself. The GP relationship with patients is what promotes 'sense-making' [the human side of medicine].

2. The look and the feel of the Carepoint system

The clinicians regarded the look of the Carepoint system as overly-detailed and uninteresting in appearance. They favoured a simplified but more dynamic, graphic interface. Thus:

- *"The much more that you, as a clinician, can do with a sophisticated, animated interface could make Carepoint much more valuable. It's a more dynamic thing—you're actually moving a patient into a place."*
- *"You could almost have some spoken words at the spot where you click on an icon. The spoken section might, for instance, say 'This is really important; I want to be seen today'. You would open a message if there was a spoken comment with it."*

A number of improvements to the look and feel of the system were offered, including the incorporation of a friendlier, more approachable language, better graphics and various commonplace web-page design techniques (such as a hovering mouse, multiple windows, and clearer priority lists). The group argued that the Carepoint system should be more tailored to user type, where displays and functions might be used for clinicians/ receptionists (hovering mouse) and patients (touch-screen).

3. The usability of the Carepoint system

In general, the professional attendees rated the Carepoint system as relatively easy to operate, and likely to be reliable in a practical setting. However, given the brevity of the

© 2003 PatientView Ltd

average GP consultation, the length of time needed to arrange an electronic booking appeared to be out of all proportion to the importance of the task. Thus:

- *"If you're imagining the GP doing the patient negotiating, it's actually a new task—in addition to all the other things going on in the consultation."*
- *"You don't need a doctor's expertise; anyone could do these basic things themselves."*

4. Challenges of adapting to traditional practice

4.1 Patient choice and expectations

The professional group asserted that the choices offered to patients by the Carepoint system needed to be realistic. While the manager-and-clinician attendees recognised that some patients might only want to see a doctor of their own gender, such a choice, they contended, would rule out many consultants and members of clinical teams. Patients referred through the electronic-booking system might not, in practice, always end up seeing their specified consultant. Today's patients can often be seen by more junior members of clinics. This practice was unlikely to change under electronic booking, which would result in patient disillusionment with the new system.

4.2 The GP/consultant relationship

Managers and clinicians were convinced that the Carepoint systems, and electronic booking systems threatened the important GP/consultant relationship. For example, referral back-up information about the patient would not be checked by the consultant with the electronic booking system. Thus:

- *"What happens in our work is a lot to do with negotiation between people—crossing boundaries, acting as a 'knowledge broker' between the patient and the consultant, or between consultants, or between other knowledge bases. If you have a body of relationships with people that you build up over years, then you can use that, and ring up somebody and seek advice. It's that subtlety of relationship that's important."*
- *"By assessing the clinical symptoms of that patient, the electronic-booking system makes the decision and acts as a consultant. Consultants will feel that that is being taken away from them."*
- *"One thing I would like to clarify is: where does the consultant come in all this?"*
- *"If the GP is going to make that decision to send an urgent referral, what I'd like to see is some sort of flash or flag going with it."*

The professional group recommended that consultants should continue to vet referrals under the electronic-booking process. The professionals also warned of a need for the Carepoint system to highlight urgent referrals in a way that will engage the consultant's immediate attention.

4.3 Patient self-referral

Although self-referrals are exceptional healthcare events, the consensus within the professional group was that they could not be captured in the electronic-booking system. When they do occur, self-referrals will continue to place further pressure on the time and resources of clinics, most notably in Genito-Urinary Medicine (GUM) clinics.

5. In the context of the NPfIT

The Workshop's professional participants experienced difficulty viewing the electronic-booking system in isolation. Consideration had to be given to the way that the Carepoint architecture informs, and interacts with, other components of current NHS IT systems.

© 2003 PatientView Ltd

Thus:
- *"The architecture needs to be structured, and time allowed for people to negotiate the system."*
- *"We all need to know that this is all going to meet up in the end."*

6. Perceived benefits of the Carepoint system

The managers and clinicians in the break-out group were generally approving of the Carepoint system. Thus:
- *"So, it could be as an information-providing system that I think the Carepoint system is likely to be good. You could be solving the problem of sheer ignorance about opportunities, and getting people seen more quickly at other accessible hospitals."*
- *"There's no reason why patients couldn't re-update the time of their appointment. Those who can't make the date could come in and change it themselves. That would be a real plus."*

© 2003 PatientView Ltd

Section 3

Break-out session for patients and patient representatives

This section of the report focuses on the experiences of the patient and patient representative group, which included six representatives, as well as PatientView and EDS / A.T. Kearney facilitators.

1. Most important findings

- System needs to be well piloted, tried and tested
- Resources [and clear protocols] needed to ensure good implementation, e.g., people, PCs, training
- The system should capture special needs, e.g., chronic illness, impaired vision, ethnicity, language, cultural, etc. (*for quality referrals)*
- Appointments booking system needs to be accessible to/used by all patients and not only those with PCs/computer literate
- Patient-authorised access for a nominated relative/carer needed
- Will the system give enough information to make the right referral choice? e.g., consultant, accessibility, transport, clinic facilities etcetera.
- Provision for high priority/urgent bookings, for example., override system by GP / consultant

2. The look and feel of the Carepoint system

The initial reactions of the patient and patient representatives regarding the look and feel of the Carepoint system were mostly positive. Specific remarks made about 'the look and the feel' of the system included:

- *"I was struck by the simplicity and user-friendliness of the screen, and the concept of making appointments in a diary."*
- *"Looks quite good and is simple to use."*
- *"Facing the Carepoint screen was similar to booking airline flights on the Internet—you put the options in and you see what comes out."*

But patient and patient representatives suggested some possible improvements to the system's look and feel: Thus:

- *"Neither the NHS nor the government that asked for the electronic-booking system to be designed understand patients. They see patients as similar to people making an airline or train booking. They do not think of patients as individual people with individual problems. This is where electronic systems could fall down."*
- *"Patients need to be involved in this process. They have to be able to see the screen, and even use it, to ensure that they make the most of their opportunities for choice."*

The patient and patient representative group therefore recommended that the Carepoint system should pose no problem if the patient is talked through it by someone who is computer literate and sensitive to individual needs.

© 2003 PatientView Ltd

3. The usability of the Carepoint system

The patient and patient representative group seemed satisfied with the explanations received from the sponsors and host regarding the confidentiality (assuming that the system did not store patient records) and robustness of the system (in cases when the system crashes). They were confident that the electronic booking of referrals would promote a more patient-centric NHS system provided the Carepoint system truly offered patients choices. Being provided with information about travel, car parking, etc, was also seen as a true advance. But a number of the group raised some general concerns. Thus:

- *"All patients must be able to have access to the electronic-booking system and the choices it offers. Yet a lot of the population do not have computers or mobile phones, and some don't have phone lines."*
- *"Patients who delay using the BMS system to make an appointment would lose an opportunity of getting the earlier appointments offered at the GP practice."* This is why the group suggested adding a strap line to the printed-out appointment prescription: **"**The sooner you book; the sooner you get an appointment**"**.
- *"The NHS needs to know what type of patient it is targeting. Vital that the NHS does not believe that it is dealing with standard patients."* The patient attendees accordingly advised adaptation of the electronic-booking system to take into account the special needs of patients.
- *"Although the Carepoint system allows patients to authorise carers or friends to make electronic bookings, the name of the appointed person does not appear to be recorded on the system."*
- *"Many patients will feel uncomfortable if the electronic booking of referral appointments is made within sight or earshot of the people in the waiting area. A sense of privacy and confidentiality will therefore be important if the procedure is to gain widespread acceptability among the patient population."*
- *"Electronic booking seems to discourage one-to-one relationships between GPs and consultants."* The patients and patient representatives feared that without an element of personal contact in the electronic-booking system the GP/consultant relationship might be eroded (or even eradicated)—to the detriment of patients.

4. The perceived benefits of the Carepoint system

Despite reservations about the electronic booking of referral appointments, the patient and patient representatives were very positive about the process and features of Carepoint. The general support for Carepoint was, however, predicated on the fact that patients are more involved in the process, that they truly share in the decision-making, that they look at the screen and make personal selections, and that trained staff help them understand the new technology and its implications. Without GP practice guidelines doctors may not necessarily use the Caerpoint system for the patients' benefit. Thus:

- *"Each patient has different needs and priorities. The electronic booking of referral appointments would help speed up the currently slow business of obtaining a referral."*
- *"Patients who get a consultant appointment 'there and then' will be better able to plan their lives."*
- *"Deferral will allow patients to consult with their families, conduct research to find out who was the best specialist, or simply check their diaries."*
- *"If the cancellations were recorded on screen by the electronic-booking system,*

© 2003 PatientView Ltd

consultants might be less tempted to cancel."

- *" If implemented properly* [given greater patient choice and involvement], *Carepoint will help shift medical practice away from the old, more paternalistic approach to one where doctors and patients take medical decisions in partnership."*
- *"The transparency of the system will encourage patients to become more trusting about the whole process of referral"*
- *"Patients who are offered referral choices will be more certain about their own priorities when arranging appointments—such as whether to opt for a longer waiting time to get a consultant of their choice, or whether to go for speed of access instead."*

5. Some ideas for next-generation design of the Carepoint system

The group also produced a few ideas for the next-generation Carepoint system. These were:

- **Booking transport** through the Carepoint system. The dual-booking system could extend to other community services in the long-term.
- **Tracking paperwork** received by the consultant. GPs would then be reminded if the paperwork had not been supplied prior to an appointment.
- **Audit and improvement using Carepoint data,** which should raise the quality management (for example, consultant cancellations, and whether patients were able to obtain their preferred choices).
- **Choice of consultant**. Information about consultant qualifications, experience, specialisms, etc, displayed by the electronic-referral system, would be advantageous to patients (and even, possibly, to GPs).
- **Choice of clinic.** More extensive information about the facilities offered by clinics such as wheelchair access, availability of interpreters etcetera.
- **Appointment prescriptions for a specified and limited period of time**, so helping to track patients who chose the BMS route but who do not follow through.

© 2003 PatientView Ltd

Section 5

Some final thoughts

The government has a number of key objectives in launching the electronic-booking system. From the perspective of the Workshop participants, the Carepoint system managed to satisfy them all. However, there are caveats.

1. Creation of a more effective referral system that decreases demands made on administrators

Managers, clinicians and patients recognised that the Carepoint system was capable of eliciting a more effective referral system. The sheer immediacy of the electronic system versus the postal referral system, made this objective a certainty. Patient representatives stated:

- *"I am impressed by the software presentation (although there may be things that will not work). The system is a good first step towards speeding up from the status-quo referral process, which is very slow."*
- *"Very good system, particularly if, in the future, patients need recurring appointments—which they could make themselves."*

2. Less—rather than extra—work for healthcare providers

All the healthcare stakeholders felt that the Carepoint system would achieve this objective. A single proviso was that the system should be managed primarily by receptionists, rather than by GPs. The Workshop clinicians argued that electronically booking a referral represented a new task for them. However, they also acknowledged that the simplicity of the system meant that anyone could perform the job. Thus:

- *"You don't need a doctor's expertise; anyone could do these basic things themselves."* [Professional group]
- *"Looks quite good and simple to use."* [Patient group]

3. Greater patient choice over the time and day of appointments

Workshop participants in the break-out group for managers and clinicians emphasised the significance of the enhanced level of patient choice that the Carepoint system would bring:

- "*So, it could be as an information-providing system that I think the Carepoint system is likely to be good. You could be solving the problem of sheer ignorance about opportunities, and getting people seen more quickly at other accessible hospitals."* [Professional]
- *"Some of the problems with speeding-up the appointment process may be solved, as, currently, patients get no choice. They get sent a letter through the post, asking them to attend on a date which they may not be able to make. Whereas this system allows patients to select dates to suit them."* [Professional]

Patients with choice could be clearer about satisfying their own priorities when arranging appointments—for example, whether speed of access is more worthwhile than being able to see a preferred consultant.

© 2003 PatientView Ltd

4. Healthcare services designed around patient needs (notably, the new telephone service for booking care)
Managers, clinicians, patients and patient representatives alike acknowledged the importance of the Carepoint and BMS system, albeit in different ways:

- *"There's no reason why patients couldn't re-update the time of their appointment. Those who can't make the date could come and change it themselves. That would be a real plus."* [Professional]
- "*It will allow consultation with the family, research on finding the best clinician, or just let patients consult their diaries at leisure*." [Patient group]

5. An awareness of new trends in the healthcare environment, giving the system the capacity to accommodate change
The point was made in the patients' and patient representatives' break-out group that knowledge gained from electronic-booking pilot studies (and this Workshop) could be applied to ensure a smooth transition from the traditional referral process to the new electronic-based one. The group approved of the consortium's approach in consulting with end-users to try to identify ways to improve its technology. All Workshop attendees were aware, too, that the Carepoint system was flexible enough to incorporate changes.

6. Improvements in the quality of the partnership between physicians and patients
Attendees in the patients' and patient representatives' break-out group insisted that the Carepoint system promoted a better relationship with doctors, by shifting away from a more paternalistic approach to one in which patients and doctors make medical decisions in partnership.

7. Technology that does not get in the way of that relationship
A number of the Workshop's patient representatives thought that if the electronic-booking technology is fully explained to patients, so that they understand the options available to them, Carepoint could actually alleviate some of the fears that patients have about referral.

The caveats

Where patients and professionals disagreed about Carepoint's challenges
Not all participants could agree with each other regarding Carepoint system's problems :

- GPs, for instance, suspected that the proposed system might threaten their traditional one-to-one networking with specialists. Consultants feared some loss of control over the referral process. Patients, on the other hand, felt empowered by the technology [if the system was properly implemented].
- Clinicians and managers thought that the visual-display aspects of the system were too simple, and should be 'enhanced' with the addition of more facilities. Yet patients liked the uncomplicated nature of the screen display.
- Doctors wanted no mention of consultant qualifications on the electronic booking form. Patients, though, were keen to see data, on consultant specialities and experience and numbers of operations per year.

Where patients and professionals agreed about Carepoint's challenges
Nonetheless, all the attending healthcare stakeholders shared some common concerns. Thus:

- The system made no provision for 'life-and-death' appointments. Both patients/patient

© 2003 PatientView Ltd

representatives and clinicians/managers were certain that GPs would need to continue to override the electronic-booking procedures and telephone consultants whenever they believed that a patient needed an urgent appointment.
- Workshop participants all warned of the dangers of raising patient expectations by offering choices that could not be matched by the NHS in practice (such as offering to patients a female orthopaedic specialist, when none exists).
- Patients and patient group representatives were especially anxious that the electronic-booking system paid no heed to the special needs of certain categories of patients—such as diabetics, the visually impaired, non-English speakers, access to female staff in some circumstances etcetera

Conclusion

- In the course of the day's summing-up, the Workshop was voted a success by participants.
- All those involved in the event appeared to have learned something.
- Sponsors considered that they had received a significant level of input from healthcare stakeholders—who offered solutions, as well as pointed out the challenges faced by Carepoint.
- One take-away message of the July 14th 2003 Workshop is that healthcare stakeholders can make important contributions to IT innovation.

© 2003 PatientView Ltd

Appendices

Appendix I
What participants said about Carepoint: the benefits and the challenges

Appendix II
What participants said about electronic booking in general

Appendix III
The mini-survey of attendees

Appendix IV
The two scenarios

Appendix V
The programme

Appendix VI
The participants

Appendix VII
Flip charts for professional break-out group

Appendix VIII
Flip charts for the patients and patient representatives break-out group

Carepoint's challenges...

"It was so cumbersome, with so much information on one screen. It was very cluttered. Having so much information on the one screen at the same time made it very difficult to read."

[Consultant]

"How safe is the data when it goes from the GP to the database? The issue of encryption has to be discussed."

[Electronic-booking manager]

"I think the way the actual appointment dates are presented could be improved. I'm not sure I would know what's available. It wasn't clear what dates were available."

[Electronic-booking project leader]

"*The electronic-booking system has a priority box, relating to the urgency of the patient's symptoms, which is filled in by the GP. This is taking the decision-making away from the specialist."*

[Consultant]

"How can the electronic-booking system be used by people authorised by the patient? Some patients, when unwell, might prefer to authorise a friend or carer to use the system on their behalf. Also, how can visually-impaired people use the system to its full potential?"

[Patient representative]

"The issue of patients with special needs does not feature on the electronic-booking system at all. In many cases, details about special-needs provision is vital to help the patient determine their choice of clinic. It would be good to have on-screen access to information about the facilities offered by clinics in relation to such facilities as wheelchair access, religious and cultural needs, translators, etc."

[Patient representative]

...and benefits

"If we can use these electronic systems to enhance our activities, and to help us all, to help the consultants to get the right things through, and to make it easier for us to see where their slots are—Carepoint becomes a valuable tool."

[GP]

"After leaving the GP's office, a patient often forgets a significant proportion of what has been said to them. Therefore, the printout from the electronic-booking system (showing the date and place of their appointment, the consultant, and travel information) is beneficial to many patients."

[Patient]

"Certain GP-generated problems may be overcome by the electronic-booking system. For instance, some GPs will advise their patients that they need a hospital appointment, but do not write the letter while the patient is there. In fact, sometimes the letter does not get written for ages. When the patient checks on the progress, say three weeks on, they find this out."

[Patient representative]

"*So, it could be as an information-providing system that I think the Carepoint system is likely to be good. You could be solving the problem of sheer ignorance about opportunities, and getting people seen more quickly at other accessible hospitals."*

[GP]

"Some of the problems with speeding-up the appointment process may be solved, as, currently, patients get no choice. They get sent a letter through the post, asking them to attend on a date which they may not be able to make. Whereas this system allows patients to select dates to suit them."

[Electronic-booking manager]

"A very good system, particularly if, in the future, patients needing recurring appointments could make them for themselves—for instance, people with diabetes need a series of appointments throughout the year, at set times, with dieticians, blood tests, annual checks, etc."

[Patient representative]

What participants said about electronic booking in general

"I have mixed feelings on the honesty and transparency seen in communication between GP and patient regarding the seriousness of symptoms. A GP may not always tell a patient that symptoms are serious—to spare them worry. Then, a patient without knowledge of the urgency of their situation, when faced with the electronic-booking system, may give priority to the choice of consultant, or to clinic accessibility, and choose a later appointment to achieve their preference."

[Patient representative]

"How am I going to be involved in the electronic booking process ? Also, clarification is needed as to what point the specialist and the clinical team become involved."

[Consultant]

"The NHS specification for the system tends to standardise patients. Yet patients are all different. The electronic-booking system is fine for straightforward, uncomplicated diagnosis. But people are complex, and their problems are not always straightforward. Even with the same illness, no two patients have the same needs."

[Patient representative]

"The electronic-booking system cannot be looked at in isolation. I question whether one could introduce this system in isolation, and then introduce other, related systems later."

[GP]

"Privacy and confidentiality must be taken into account if bookings are not made in the GP's office. Patients will not wish to discuss the pros and cons of consultants, or their own special needs, within earshot of the waiting area, or have other people viewing their screen while in use. Many patients would prefer it not to be public knowledge that they are in need of referral."

[Patient representative]

"All people must be enabled to have access to the electronic-booking system and the choices it offers. There are many people without computers, phone lines or mobile phones. There are people who are disadvantaged because of physical impairments or because they are housebound or bed-bound. There are people for whom language is a problem. It is important that the NHS knows who it is targeting and does not believe that it is dealing with standard patients."

[Patient representative]

Appendix III: The mini-survey of attendees

Mini-survey: profiling questions for attendee medical professionals

1.) Thank you for participating. Would you be so kind as to specify whether your organisation is a single-GP practice, a multi-GP practice, or are you a specialist working within a hospital setting?

a.) I belong to a single-GP practice …………………………………………………… ☐

Approximate total number of patients registered with the practice:

- **i.)** Less than 1,000 ………. ☐
- **ii.)** 1,000-1,999 …………… ☐
- **iii.)** 2,000-2,999 ………….. ☐
- **iv.)** 3,000 or more ………... ☐

b.) I belong to a multi-GP practice …………………………………………………….. ☐

Approximate total number of patients registered with the practice:

- **i.)** Less than 3,000 ……….. ☐
- **ii.)** 3,000-3,999 …………… ☐
- **iii.)** 4,000-4,999 …………... ☐
- **iv.)** 5,000 or more ………... ☐

c.) I am a specialist working within a hospital setting ………………………………... ☐

2.) What are the approximate number of referrals you request / receive every month?

[Please insert number] …………………………….

Mini-survey: profiling questions for attendee patient representatives

1.) Thank you for participating. Would you be so kind as to specify whether your organisation is <u>an umbrella group</u> representing other patient groups, or whether it represent patients.

a.) Our organisation is an umbrella group, representing patient groups …………… ☐

Total number of patient groups represented:

- **i.)** Less than 10 ………….. ☐
- **ii.)** 10-49 ………………….. ☐
- **iii.)** 50-99 ………………….. ☐
- **iv.)** 100-199 ………………. ☐
- **v.)** 200-499 ……………….☐
- **vi.)** 500+ …………………..☐

b.) Our organisation is <u>not</u> an umbrella group, and represents patients ……………. ☐

Approximate total number of patients represented:

- **i.)** Less than 100 …………☐
- **ii.)** 100-499 ……………….. ☐
- **iii.)** 500-999 ………………. ☐
- **iv.)** 1,000-4,999 …………... ☐
- **v.)** 5,000-19,999 …………..☐
- **vi.)** 20,000-49,999 ………... ☐
- **vii.)** 50,000-99,999 ………. ☐
- **viii.)** 100,000-249,999 ……. ☐
- **ix.)** 250,000-999,999 …… ☐
- **x.)** 1m-less then 2m ……..☐
- **xi.)** 2m-less than 5m ……. ☐
- **xii.)** 5m+ ………………… ☐

2.) Do the members of your organisation maintain regular appointments/contact with specialists?

Yes ….. ☐ Sometimes / it depends ….. ☐ No ….. ☐

Mini-survey of attendee IT familiarity

Questions 3.) to 6.) are personal to yourself

3.) Do you access the Internet (purposes of work and/or pleasure)?

i.) At least once a day ……. ☐ **iii.)** At least once a month ………….. ☐
ii.) At least once a week ….. ☐ **iv.)** Have not used it ……..………….. ☐

4.) Do you use email (purposes of work and/or pleasure)?

i.) At least once a day ……. ☐ **iii.)** At least once a month ………….. ☐
ii.) At least once a week ….. ☐ **iv.)** Have not used it ……..………….. ☐

5.) Do you book airplane, cinema or other sorts of tickets online?

i.) Frequently ……………. ☐ **iii.)** Rarely …………………………... ☐
ii.) Occasionally …………..☐ **iv.)** Have not done so …..…………... ☐

6.) Do you shop online?

i.) Frequently ……………. ☐ **iii.)** Rarely …………………………... ☐
ii.) Occasionally …………. ☐ **iv.)** Have not done so …..…………... ☐

To clinicians and managers:

7.) Have you witnessed any of the following information technology functions in action within a UK healthcare setting?

a.) Patients emailing doctors
i.) Yes, at my own practice ………… ☐ **iii.)** Possibly / it depends ……………. ☐
ii.) Yes, outside my own practice …… ☐ **iv.)** No ……………………………….☐

b.) Online appointment scheduling
i.) Yes, at my own practice ………… ☐ **iii.)** Possibly / it depends ……………. ☐
ii.) Yes, outside my own practice …... ☐ **iv.)** No ………………………………. ☐

c.) Online referrals
i.) Yes, at my own practice ………… ☐ **iii.)** Possibly / it depends ……………. ☐
ii.) Yes, outside my own practice …... ☐ **iv.)** No ………………………………. ☐

d.) Electronic prescribing
i.) Yes, at my own practice ………… ☐ **iii.)** Possibly / it depends …………… ☐
ii.) Yes, outside my own practice …… ☐ **iv.)** No ………………………………. ☐

Thank you. That concludes the survey.

To patients and patient representatives:

7.) Have you witnessed any of the following information technology functions in action within a UK healthcare setting?

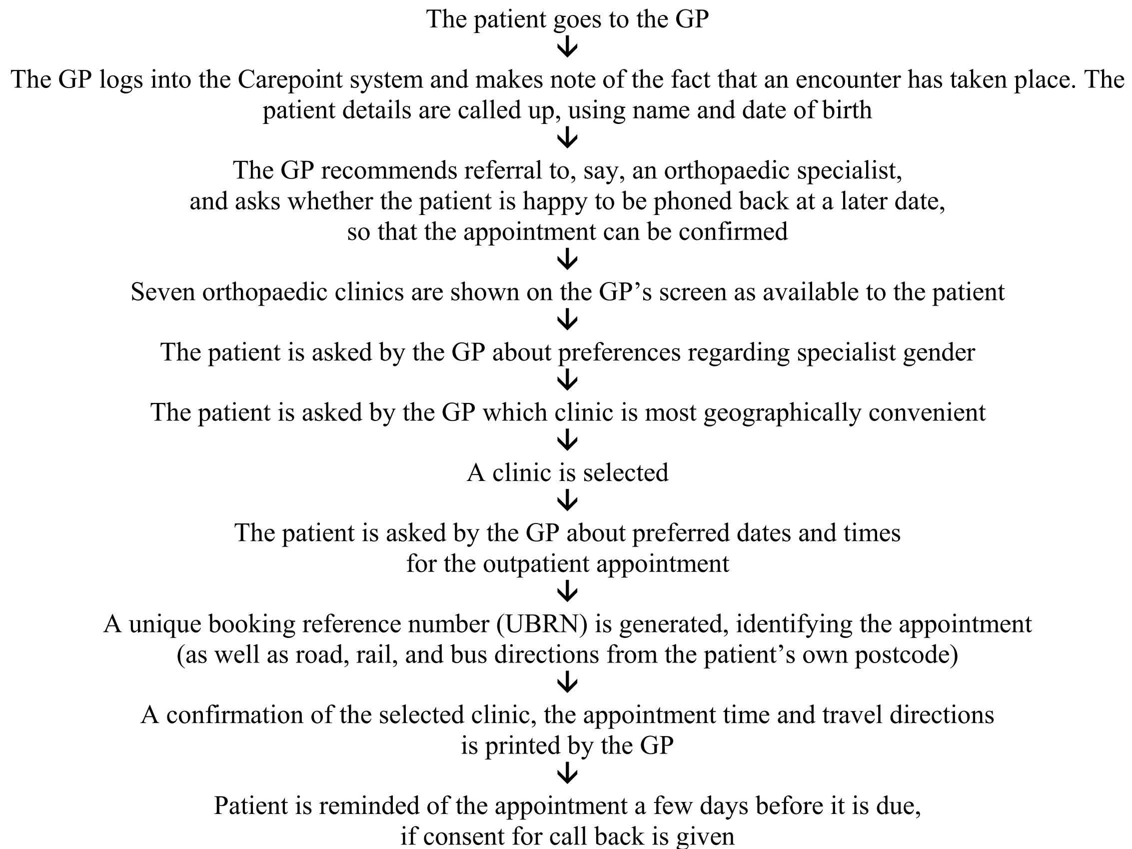
a.) Patients emailing doctors
Yes …… ☐Possibly / it depends ….. ☐No ….. ☐

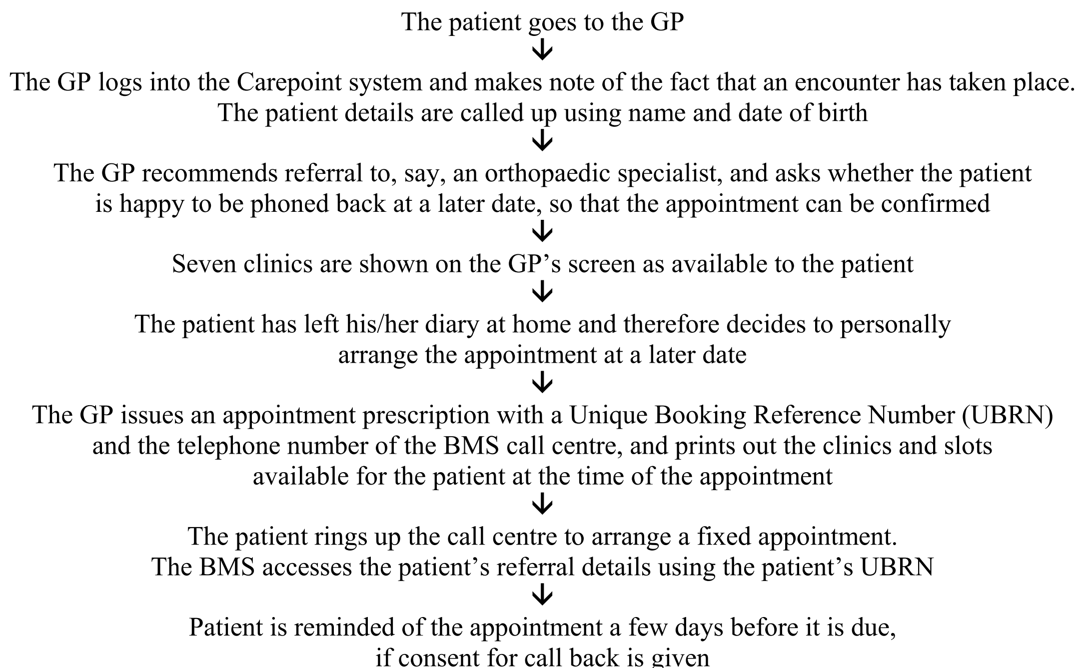
b.) Online appointment scheduling
Yes …… ☐Possibly / it depends ….. ☐No ….. ☐

c.) Online referrals
Yes …… ☐Possibly / it depends ….. ☐No ….. ☐

d.) Electronic prescribing
Yes …… ☐Possibly / it depends ….. ☐No ….. ☐

Thank you. That concludes the survey.


Steps involved in end-to-end booking using the Carepoint system
The patient goes to the GP
The GP logs into the Carepoint system and makes note of the fact that an encounter has taken place. The patient details are called up, using name and date of birth
The GP recommends referral to, say, an orthopaedic specialist, and asks whether the patient is happy to be phoned back at a later date, so that the appointment can be confirmed
Seven orthopaedic clinics are shown on the GP's screen as available to the patient
The patient is asked by the GP about preferences regarding specialist gender
The patient is asked by the GP which clinic is most geographically convenient
A clinic is selected
The patient is asked by the GP about preferred dates and times for the outpatient appointment
A unique booking reference number (UBRN) is generated, identifying the appointment (as well as road, rail, and bus directions from the patient's own postcode)
A confirmation of the selected clinic, the appointment time and travel directions is printed by the GP
Patient is reminded of the appointment a few days before it is due, if consent for call back is given


Steps involved when the patient makes an appointment via BMS
The patient goes to the GP
The GP logs into the Carepoint system and makes note of the fact that an encounter has taken place. The patient details are called up using name and date of birth
The GP recommends referral to, say, an orthopaedic specialist, and asks whether the patient is happy to be phoned back at a later date, so that the appointment can be confirmed
Seven clinics are shown on the GP's screen as available to the patient
The patient has left his/her diary at home and therefore decides to personally arrange the appointment at a later date
The GP issues an appointment prescription with a Unique Booking Reference Number (UBRN) and the telephone number of the BMS call centre, and prints out the clinics and slots available for the patient at the time of the appointment
The patient rings up the call centre to arrange a fixed appointment. The BMS accesses the patient's referral details using the patient's UBRN
Patient is reminded of the appointment a few days before it is due, if consent for call back is given

Programme

12.00 midday ***Buffet lunch***
[Adjoining Memphis Room]

12.30 ***A few words of welcome***
[Adjoining Memphis Room]
Dr Alexandra Wyke, *Managing Director, PatientView*

12.35 ***Start of meeting (Session one)***
[Memphis Room]
The Role of Electronic Booking
Dr Martin Evans, *Health Sector Client Executive, EDS*

12.50 ***Demonstration (Session two)***
[Envisioning Room]
Carepoint Partners

Interactive session: two case studies
» Booking appointments online with the patient present (primary care setting)
» The patient makes a booking through the BMS (call centre)

13.50 **Further questions and discussion**

14.10 ***Break-out (Session three)***

Medical professionals
[Memphis Room]
Jeanette Marchant, *PatientView facilitator*
Michael Dale, *EDS facilitator*

Patients and patient representatives
[Boardroom]
Angela Hayes, *PatientView facilitator*
Patricia Tomasiewicz, *EDS facilitator*

15.10 **Tea**

15.30 ***Plenary (Session four)***
[Memphis Room]
Chairs: Dr Alexandra Wyke, *Managing Director, PatientView*
Dr Martin Evans, *Health Sector Client Executive, EDS*

Key highlights and challenges
Summary of key points from medical professionals
Summary of key points from patients and patient groups

15.50 **Discussion**

16.30 ***Meeting concludes***
Summary and thanks
Dr Alexandra Wyke, *Managing Director, PatientView*

Final words
Dr Martin Evans, *Health Sector Client Executive, EDS*

Appendix VI. The participants

Ashmeed Aziz	Newham Health
Michael Brett	Revive
David Cowan	EDS
Michael Dale	EDS
Mike Davy	NO PANIC (also attending as a patient)
Dr Martin Evans	EDS
Shaun Doddimead	CAS Services
Jacky Flynn	Diabetes UK
Julie Foxton	HEART UK
Chris Fosberry	Revive
Mr Babatunde Gbolade	St James's University Hospital, Leeds
Joe Gherardi	EDS
Gareth Hall	Microsoft
Gillian Hall	The West Berkshire Neurological Alliance
Angela Hayes	PatientView
Dr Alasdair Honeyman	Lambeth Walk Group Practice
Tony King	North-East London Strategic Health Authority
Ravi Kumar	Revive
Jeanette Marchant	PatientView
Clive Nead	PatientView (also attending as an asthma patient)
Lilian Owens	NO PANIC
Simon Sheaston	Microsoft
Alex Price	A. T. Kearney
Hannah Smith	Tower Hamlets PCT
Patricia Tomasiewicz	EDS
Dr James Willis	The Royal College of General Practitioners (Wessex Faculty)
Liz Woodhouse	Age Concern, Berkshire
Dr Alexandra Wyke	PatientView

Flip chart—the look and the feel of the Carepoint system

Benefits:

Gets a date there and then
Gives a greater profile of availability

Challenges

Too cumbersome
An excess of on-screen information
Needs to show early processes (and why it is happening at every step)
Needs to answer key questions with more detail
Needs the ability to search on each field (eg, date, distance, etc)

Flip chart—improving the system's look and feel with new features

Solutions suggested by attendees:

- **The way dates are presented**
  Revive works well
  Quick overview, and then select

- **Screen designed for user type**
  Touch screen (patients)
  Hover (clinicians)

- **Animated user interface** (suggested features)

- **Sound bites and pictures**

Figure 3.3: Flip chart—ease and speed of use of the system (initial reaction)

Benefits:

Did not necessarily need to be performed by the GP
  Could potentially be operated by patients
  Could potentially be operated by administrators

Challenges:

Seemed slow in relation to the value it could bring to the GP
Represented a new task for the GP

Flip chart—practical aspects of Carepoint (and similar technology)

Adapting traditional protocols:

- The question "The gender of the consultant?" may rule out many choices within a chosen consultant's team
- Carepoint loses the subtlety of the network in terms of access to a knowledge base (but Carepoint does give a more equitable view of service availability, acting as a 'sense' broker)
- Regulation? At the moment, the decision is made by the consultant, not by the GP decision-making protocol/guidance needed
- Needs an override for urgent cases
- Patient self-referral bypass booking

Solutions suggested by attendees:

- Involve consultants
- Referrals categorisation: 'urgent', 'soon', 'routine'
- If urgent, Carepoint needs to flag
- Vet by consultant
- Input by GP

Problems with NPFIT

- Flexibility in design
- Take on new technologies
- Timings
  - Needs load balancing
  - Connection with NHS Net
  - GP links electronic planned (but if PACS added, this would compromise bandwidth)

Solutions suggested by attendees:

- Patient access embedded, of which ebooking is a part
  (eg, elibrary, Integrated Care Record Service, etc)
- "Whole System Journey"
- Primary-care system evolved
  - ebooking
  - within 'Grand Plan'
  - within flexibility to include new ideas
  - broadband

Flip chart—benefits of the Carepoint system

- Speeds up the referral booking process
  (the current manual system takes 3-4 weeks to get an appointment date)
- Replaces waiting lists

Flip chart—Look and feel of Carepoint

Look and Feel

- Doctors won't do it (book appointments) – will take too much time
- Screens quite good *(problem was no-one could read the print and offer more detailed comment)*
- A bit like booking flights
- Looks familiar to people who use the Internet
- First screen too busy – hard to read
- System should pose no problem for patient if they are talked through it and supported by someone who is computer literate and sensitive to individual need
- Idea (concept) is great but it is too simplified – may not accommodate complexities and subtleties
- Printout is necessary for patient as a reminder
- Patient needs to be involved – see and use screen *to ensure they see/understand the opportunities for choice* (involvement *and education* of patient increases sense of control and of empowerment)
- Choices are very basic but offer more choice than status quo
- Consultants and other medical professionals –qualifications/ length of service/ specialisations, etc., should appear on screen
- Missing box for special needs, e.g., wheelchair access, interpreter, impaired vision, impaired hearing/speech, etc.
- Language choice, ethnicity, cultural, religious needs *e.g., diet, gender of medic., (some clinics may be more culturally sensitive than others) culturally sensitive translation of information material for non-english speakers*
- Noting of chronic illnesses possibly affecting/driving, tests, e.g., diabetes

Flip chart—the good points of Carepoint

- Get a date there and then
- Will help get better referrals *(choice)*
- Allows *(patient-appointed)* carers/relatives to make appointments on behalf of patient and could include other (community) services, e.g., transport booking, where needed

Appendix VIII: Flip charts for the patients and patient representatives break-out group

Flip chart: Challenges

- Current specification is set to cope with "perfect patient", perfect brain, with hurt toe (*easily identifiable presenting problem)*
- Additional information needed for good referral, e.g., special needs, etc. *(see flipchart 1)*
- Administrators not doctors are likely to be the people (*with the patient)* making the booking – suitable environment necessary, e.g., visual and auditory privacy
- What happens if system crashes? How will system cope with all the different hospital systems? (*are they compatible?)*
- Will system cope with large number of patients? *(What about overload?)*
- Deferred appointment *(patient choice)*, e.g., if patient waits too long to use BMS, less early slots will be available
- Should there be prioritisation of need *(life and death appointments)* within the system? Sensitivity issues, i.e., not worrying patient unduly but needing fast diagnosis confirmation – value of GP/specialist interaction leading to system override. Can specialist keep proportion of slots for emergencies?
- System may reduce important communication between GP and consultant
- Appointment prescription may need to prompt patient to act quickly on BNS bookings, e.g.:

  Valid until date to drive patient to book
  Reminder *(strap line)*: *the sooner you book, the sooner you get appointment*
  Urgent/not urgent tag may be too simple and dependent on varied interpretation – may be should have explicit acceptable date range
  Printout: bigger font needed

PATIENTVIEW

Address: Spinney Court, Plaish, Shropshire, SY6 7HX, UK
Tel: +44 (0) 1694-771-863
+44 (0) 1694-771-859
Fax: +44 (0) 1694-771-803
Email: info@patient-view.com