



The importance of timing in Parkinson's Medication

Regional audit report for Northern Ireland (Get It on Time)

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Executive summary

It is important that people with Parkinson's take their medication at the right time, every time. If someone is unable to do so, their Parkinson's can become uncontrolled – increasing their care needs considerably.

It is often the case that a person with Parkinson's can be admitted to hospital for issues that may or may not be related to their condition and therefore they are unable to take their medication at the allocated time.

The aim of this audit was to identify the systematic factors that prevent people with Parkinson's admitted into hospital from getting their medication on time, and the subsequent impact.

The key results highlighted in this audit, emphasise a need for change in the policy and procedures related to the distribution and access of Parkinson's medication in hospitals.

Based on the results of the audit, the main recommendation is that regional guidelines be put in place relating to the following areas:

- Health Trusts should review the availability of Parkinson's medication to ensure they are readily available both in and out-of-hours across all hospitals as well as patient's medication following them if they are transferred to any other part of the hospital during their stay.
- Self-medication policies should be developed to ensure those patients who are competent to self-medicate are able to do so.
- Policies should be in place in each trust to ensure accurate and timely medicines reconciliation on admission to hospital by medical and pharmacy staff.
- Ensure that drug histories also include administering times.
- People affected by Parkinson's should be involved to ensure accurate and timely medicines management in hospital.
- Nil by mouth guidelines for Parkinson's medication should be developed and implemented.
- Staff should be given training on the importance of timing in Parkinson's medication and the individual medication regimes of patients with Parkinson's.
- A regional guideline for Parkinson's medication management should be developed and implemented.

Background

Approximately one person in every 500 has Parkinson's. That's about 127,000 people in the UK.ⁱ Most people who get Parkinson's are aged 50 or over, but younger people can develop it too.ⁱⁱ

People are living longer, resulting in an increasingly ageing population. The 2009 Parkinson's UK report, *Parkinson's Prevalence in the United Kingdom*, estimates that the current figure of 127,000 people with Parkinson's in the UK will rise to 162,000 by 2020.ⁱⁱⁱ

Parkinson's is a progressive, fluctuating condition with a range of associated motor and non-motor symptoms. There is no cure for the condition, but there are medications available to help manage a person's symptoms and maintain their quality of life.^{iv}

Not everyone with Parkinson's experiences the same combination of symptoms – they can vary from person to person and progress at a different speed. Because of this, no two people will follow exactly the same medication routine.

Many people with Parkinson's have a complicated medication regime, taking more than one drug several times a day.

With the help of their healthcare professional, it can take people with Parkinson's a long time to find a medication regime that works for them. It is vital that this regime is maintained as it allows people to manage their condition effectively.

The timing of this medication regime is also very important. People with Parkinson's need to take their medication at a specific time every day and these times will vary from person to person.

If people with Parkinson's are unable to take their medication at the right time (eg, if their regime is disrupted by an admission to hospital) the balance of chemicals in their body can be severely disrupted. This leads to their Parkinson's becoming uncontrolled – increasing their care needs considerably.^v

Delayed or missed doses of medication in hospital can prolong a patient's time in hospital, causing unnecessary and ongoing health complications at additional cost to the health service.

Today there are approximately 3,500 people living with Parkinson's in Northern Ireland. During the audit process we identified the numbers of people with Parkinson's who were admitted to hospital in Northern Ireland in 2011.

Table 1 below shows the number of people with Parkinson's who were admitted to hospital in each of the five Health & Social Care Trusts in Northern Ireland in 2011.

Health and Social Care Trust	Number of people with Parkinson's admitted to hospital in NI in 2011
Northern	224
Southern	332
South Eastern	401
Belfast	379
Western (January to July 2011)	229
Total	1,565

Motivation

A third of people diagnosed with Parkinson's are admitted to hospital each year and many experience poor medicines management.^{vi}

“My husband's stay in hospital was longer than planned because he received no medication for the first 36 hours.”

Parkinson's UK member, 2011

Many admissions for planned surgery or for emergencies are unrelated to Parkinson's.

When a person with Parkinson's goes into hospital, there are a number of reasons why they may be unable to get their medication on time.

These include:

- The rigidities of the ward drug rounds
- Availability of Parkinson's medication
- No self-medication policy being in place at the hospital.

Where drug rounds fall outside the time that the person needs their medication, it is more likely that they will not receive their medication on time. Also, some hospital wards or pharmacies do not stock the required medication.

If a patient is admitted out of hours, getting the right medication can take too long. Many hospitals don't have policies that allow people with Parkinson's to self-medicate and complex systems can lead to unacceptable delays.

In 2006, Parkinson's UK launched the 'Get It On Time' campaign to make sure the thousands of people with Parkinson's admitted into hospital every year get their medication on time, every time. The objectives of this campaign are:

- All staff working in hospitals to have a better understanding of Parkinson's and why the timing of drugs is so crucial
- All staff to listen to people with Parkinson's, their carers and families regarding their individual medication needs
- All hospital pharmacies to make sure they always stock a broad range of Parkinson's medications that are easily accessible
- People with Parkinson's to have the option to self-medicate if they are able to
- People with Parkinson's to get their medication on time, every time.

When the campaign launched, Parkinson's UK asked Parkinson's nurses to complete a survey on the administration of Parkinson's medication in hospitals.

Of the 81 nurses surveyed, not one of them believed that patients with Parkinson's were guaranteed to receive their medication on time while in hospital.^{vii} These results suggested that methods of administering medication in hospitals needed to be addressed.

“Some staff did not understand the importance of the need for the medication to be given on time.”

Parkinson's UK Member, 2011

In 2011, Parkinson's UK conducted another survey of its members (people affected by Parkinson's) in Northern Ireland.^{viii}

The results of this survey were as follows:

- 98% of those surveyed indicated that they were aware of the importance of getting their medication on time.
- Only 39% of patients received their medication at the correct time while in hospital.
- Almost half (49%) were not satisfied with their medication management while in hospital.
- The results suggested that a comprehensive audit of current clinical practice in all Northern Ireland health care trusts was required. This audit would help to:
 - determine how common it is that people are not allowed to take their medication when they need it
 - identify the reasons why people were not receiving their Parkinson's medication at the prescribed times
 - encourage change

“I had to wait for the ward round and sometimes I was very stiff and other times I had very bad involuntary movement.”

Parkinson's UK Member, 2011

Aims and Objectives

The main aim of this audit was to identify the systematic factors that prevent people with Parkinson's who have been admitted to hospital (on a planned and emergency basis) from getting their medication on time, every time.

The five key objectives to this audit were:

- To assess if patients have their condition and medication regimen accurately recorded on admission
- To find out if patients have their prescribed Parkinson's medication administered on time
- To find out if patients are able to self-medicate if they are competent to do so
- To assess if key staff receive training on the importance of the timing of Parkinson's medication and consequences if this does not occur
- To investigate introducing a 'self-medication policy' in all hospitals
- The overall desired outcome of the audit is that:
- All hospitals should allow people with Parkinson's to self-medicate if they are assessed as competent to do so.
- There should be a self-medication policy in place that all staff are aware of and staff should be trained in the importance of timing of Parkinson's medication.
- There should also be facilities available to help people with Parkinson's manage their own condition, such as lockable cabinets.

There are many benefits to appropriate medicines management on resource management, staff time, length of stay and re-admission rates. Making sure that people with Parkinson's get their medication on time when in hospital makes clinical and financial sense and ensures better patient care.

Key benefits include:

- Improved quality of care – better medicines management practice across all health trusts will improve the quality of patient care. Adhering to the timing of each individual's medication regime will improve the clinical outcome of their hospital treatment or procedure.
- Improved safety – developing standards and procedures for Parkinson's medicines management will reduce the risk of medication errors, adverse incidents and patient complaints.
- Productivity savings – good medicines management will ensure prompt treatment and care while a person with Parkinson's is in hospital. This will lead to more efficient time management on wards, improved discharge planning and prevent extended hospital stays and re-admissions.
- Workforce development – nurses, doctors and other hospital staff will have a better knowledge and understanding of Parkinson's and will provide improved multidisciplinary care.

- Enhancing patient experience – when people feel they have some control over the administration of their medication, it will increase their feelings of being treated with dignity and respect. This will also help them to manage their condition at home.

Methodology

A Parkinson's UK member and local volunteer champion joined a steering group of healthcare professionals (Appendix 1) from all health & social care trusts and across disciplines, were brought together to undertake this audit.

Data Capture

The method of data collection used for this audit was retrospective (Appendix 3).

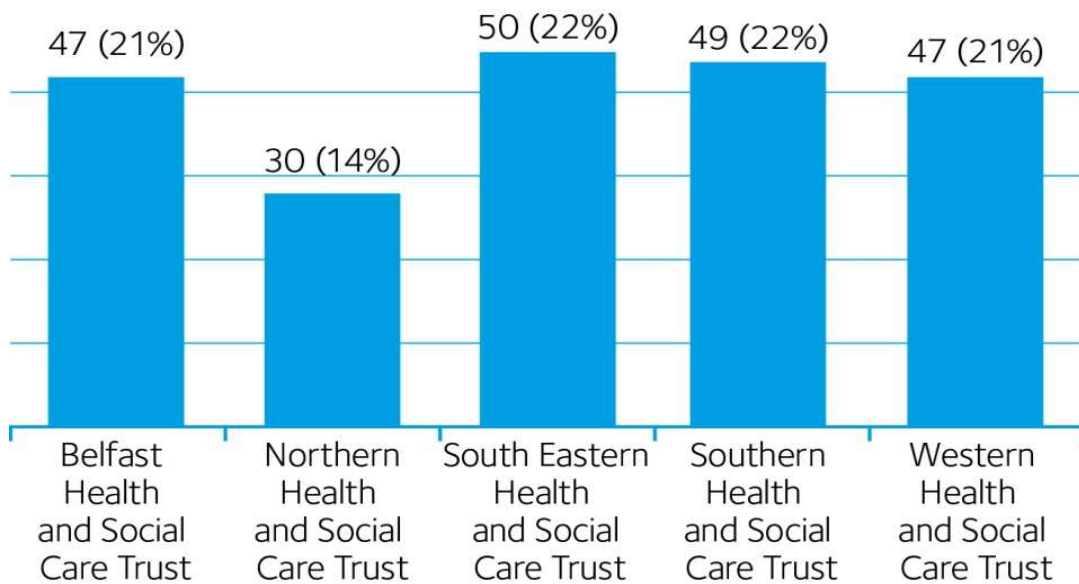
Case notes from October, November and December 2011 were used across all five health and social care trusts for the audit to avoid any seasonal bias in the findings.

As part of the 'Get It on Time' Campaign, Parkinson's UK produced a medicines management audit tool to help hospital staff monitor how effective their procedures were. This tool was adapted to make sure it worked for collecting data in this regional audit.

Each of the five health and social care trusts were given the opportunity to choose between a paper-based and an electronic version of the audit tool.

The Northern Trust and some auditors in the Belfast Health Care Trust chose to use the paper version of the data collection forms and the Southern, Western and South Eastern Trusts chose to use the electronic version. A mix of professionals carried out the data collection including senior and junior doctors and pharmacists.

223 case notes were audited across the five health & social care trusts, as **Figure 1** below shows.



Our target for 280 patient case notes was not reached as:

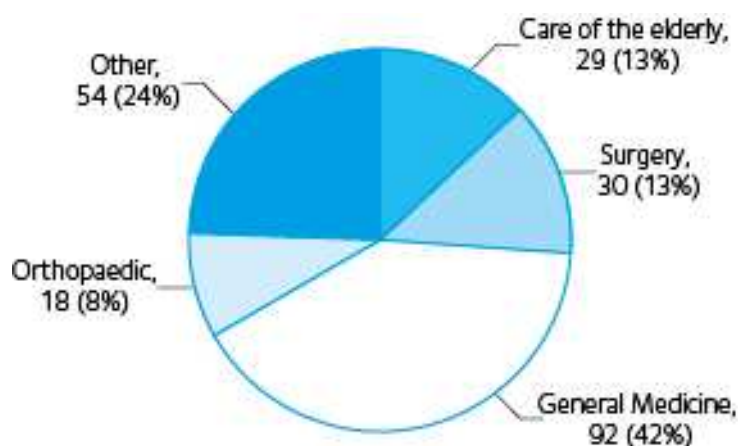
- Some charts retrieved were for Parkinson's patients who were not on Parkinson's medication
- Some charts were recalled before auditing was completed because of clinic appointments
- In some trusts doctors had limited time to collect all necessary information

Once all information was collected, the data was then analysed to reveal the results of the audit.

Results

The gender split for the patient case notes used was 36% female and 64% male. The average age of patients was 78 years of age. Eleven hospitals took part in the audit, the majority of case notes coming from the Royal Victoria Hospital and the Ulster Hospital.

Figure 2 - specialty the patient was admitted to

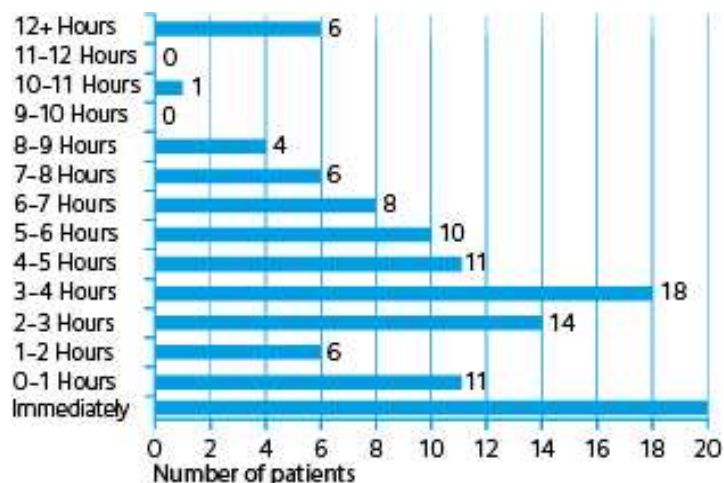


Key points:

The majority of people were admitted to general medicine. 29 (13%) were admitted to care of the elderly and 30 (13%) to surgery.

Note: Of these admissions, 69 (31%) of the patients were admitted for reasons relating to Parkinson's and 154 (69%) were not.

Figure 3 - waiting time between the patient arriving at the hospital and being admitted



Key points

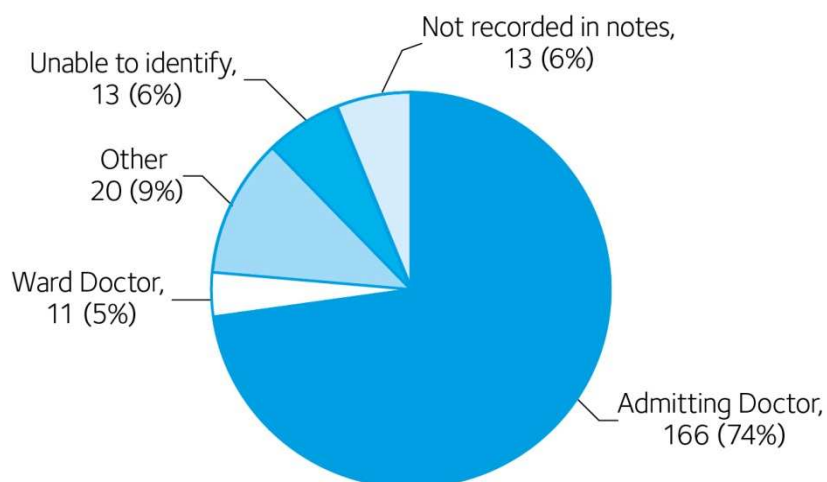
- The most common waiting time was 3–4 hours, closely followed by 2–3 hours.
- Six patients had to wait over 12 hours.
- The average waiting time was 3 hours 57 minutes.
- 20 patients were admitted straight away upon arrival.

Note: In 108 (48%) of cases the time of initial presentation and/or the admission time were not recorded and therefore have not been included here.

When a patient with Parkinson's is admitted into hospital, the accurate recording of their drug history and the recording of the Kardex are very important.

This helps make sure they receive their medication on time during their stay.

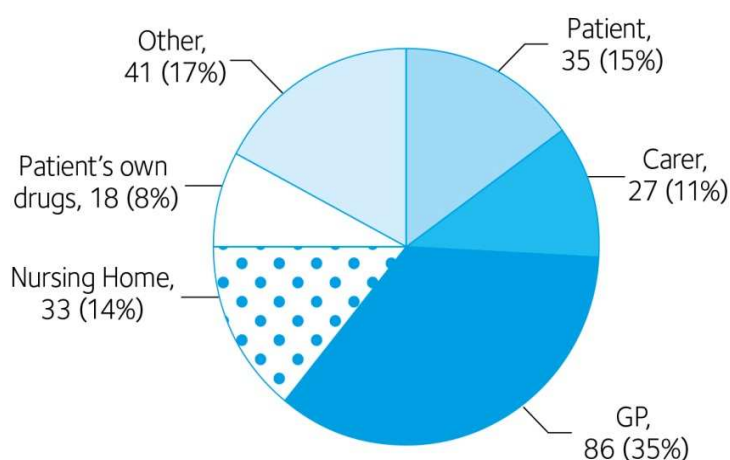
Figure 4 - breakdown of whether the drug history was taken and who recorded it



Key points

- 13 (6%) patients did not have a drug history taken during their stay.
- In the majority of cases, the admitting doctor recorded the drug history, with the second most common person being 'other'.
- Of the 20 cases (9%) where the drug history was recorded by 'other', 15 (75%) were recorded by the pharmacist.

Figure 5 - source from where drug history was taken



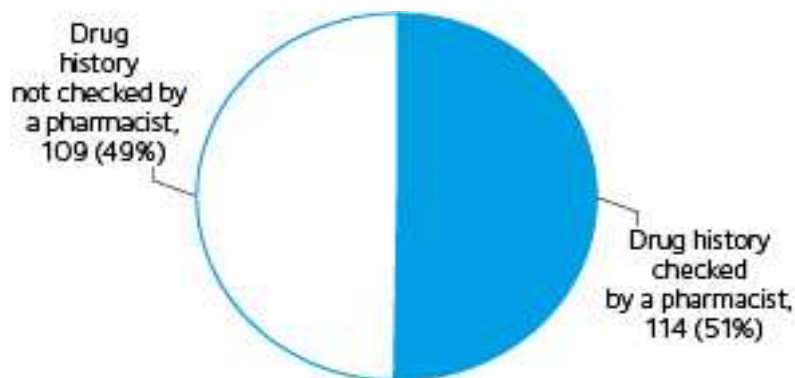
Key points

The drug history was obtained from a variety of sources, with GPs providing this in the majority of cases.

- In the 35 cases where the patient provided the drug history, 17 (49%) also provided the drug administering times.
- In the 27 cases where the carer provided the drug history, 12 (44%) also provided the drug administering times.
- In the 86 cases where the GP provided the drug history, 14 (16%) also provided the drug administering times.
- In the 33 cases where the nursing home provided the drug history, 14 (42%) also provided the drug administering times.
- In the 18 cases where the patient's own drugs were the source of drug history, 10 (56%) also specified the drug administering times.
- In the 41 cases where the source of drug history was 'other', 16 (39%) also provided the drug administering times.

Overall, drug administering times were only provided to the hospital in 37% of cases. Greater awareness of the value of this would be helpful, particularly among GPs.

Figure 6 - number of patients who had their drug history checked by a pharmacist



As well as taking a patient's drug history, effective medicines management relies on the pharmacist checking the drug history and making sure the medications required are available. They also need to make sure prescriptions are filled in a timely manner.

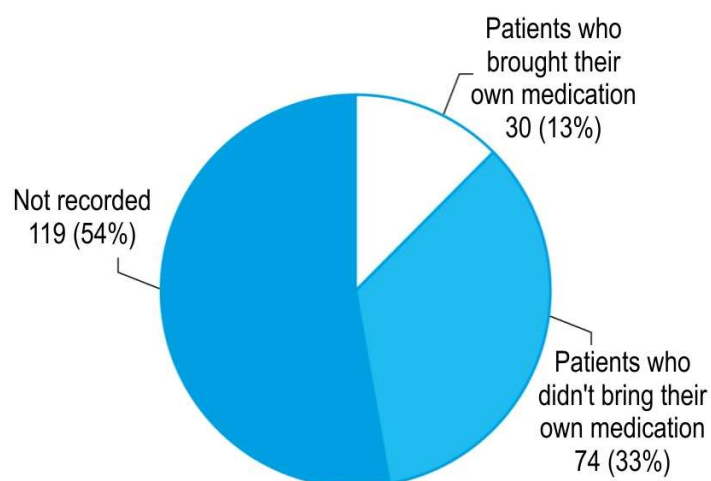
Key point

- 109 (49%) of people admitted did not have their drug history checked by a pharmacist.

NICE medicine reconciliation guidelines recommend that all patients' drug history is checked by a pharmacist within 24 hours.^{ix}

Additionally, results show that the date and time the drug history was written on the Kardex had been recorded in only two cases. This should be standard practice.

Figure 7 - the number of people who brought their medication to hospital with them



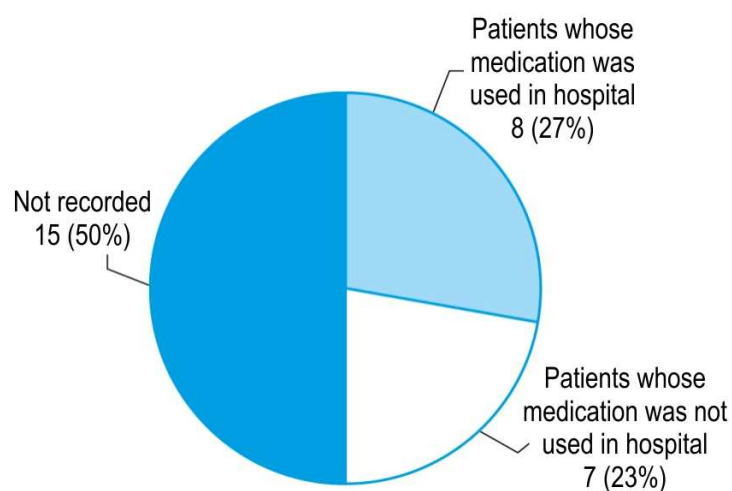
Because of the importance of taking medication on time while in hospital, we encourage people with Parkinson's to take their medication with them if their admission is planned.

Key points:

- Whether the patient brought their own medication to hospital was not recorded in 119 (54%) of cases. This makes it difficult to determine exactly how many people actually did bring their medication.
- 30 (13%) patients brought their own medication to hospital.

Some hospital wards and pharmacies do not stock all Parkinson's medications. So if patients who have a planned admission bring their own medication in suitable packaging to hospital, it eliminates the problem of unavailable medication.

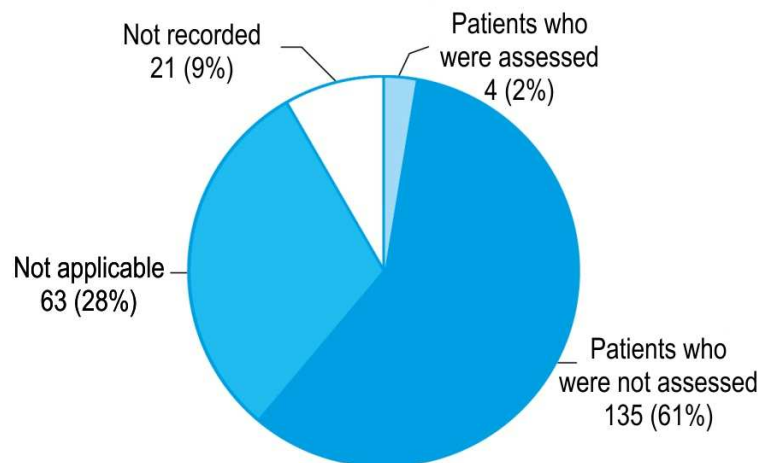
Figure 8 - number of patients whose own medication was used in hospital

**Key points**

- In 8 cases (27%) the patient's own medication was used.
- In 15 (50%) of the 30 cases it was not recorded if the patient's own medication was used by the hospital.

If patients with Parkinson's are assessed as able to self-medicate and are allowed to do so, it can reduce the incidence of delayed or missed doses of medication.

Figure 9 - number of patients assessed to determine their ability to self-medicate



Key points

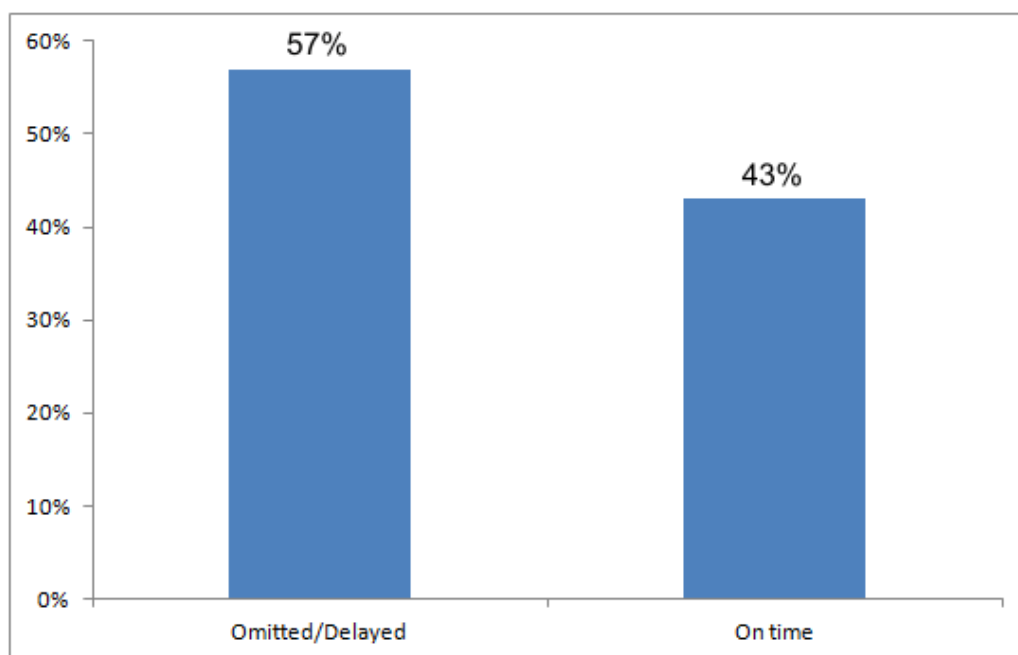
- Only four (2%) of the patients were assessed to determine their ability to self-medicate.
- Of these four patients, only one was allowed to self-medicate, which they did.

It is sometimes the case that people with Parkinson's experience a delay or miss some or all of their doses of medication while in hospital.

Where the report refers to doses of medication this means all of the treatments a patient receives of a particular medicine during their hospital stay. A patient can receive more than one medication and that is why there are more doses recorded than patients.

Where a dose is counted as omitted/delayed this means that on at least one occasion within a hospital stay a medication was omitted or delayed. Where the dose is on time then the medicine was given on time on every occasion during the hospital stay.

Figure 10 - number of doses of medication which were omitted/delayed and the number given on time



Key points

- The 57% of doses not given on time is made up of 34% omitted, 14% both omitted and delayed and 9% delayed.
- 131 (59%) patients either did not receive their Parkinson's medication or did not receive it on time. The audit did not assess the clinical impact but Parkinson's UK members suggest that any delay can cause anxiety.

Table 2 - number of doses given on time and the number of delayed or missed doses

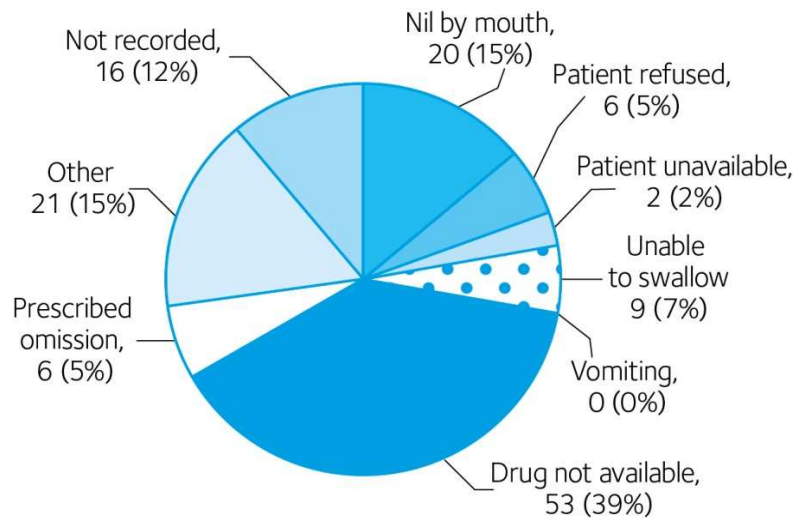
Parkinson's Drug	Number of Doses Received on Time	Number of Doses that were Delayed or Missed
Co-Beneldopa (Madopar)	51	81
Co-Careldopa (sinemet)	14	22
Stalevo	10	16
Entacapone (Comtess)	6	3
Pramipexole (Mirapexin)	2	8
Pramipexole prolonged release	1	1
Ropinirole (Requip)	5	3
Ropinirole (Requip XL)	4	1
Rotigotine (Neupro patch)	2	4
Rasagiline (Azilect)	15	10
Apomorphine	3	0
Duodopa	0	1
Domperidon	0	1
Exelon (Rivastigmine) Patch	0	2
Amantadine	3	3
Carbimazole	1	0
Mirtazapine	0	1
Trihexyphenidyl	1	0

Co-beneldopa (Madopar) is one of the most common drugs used in the treatment of Parkinson's.

Key points

- Some drugs were given without any delay or omission.
- Co-beneldopa (Madopar) had the highest instance of delays and/or missed doses.

Figure 11 - reasons for missed doses

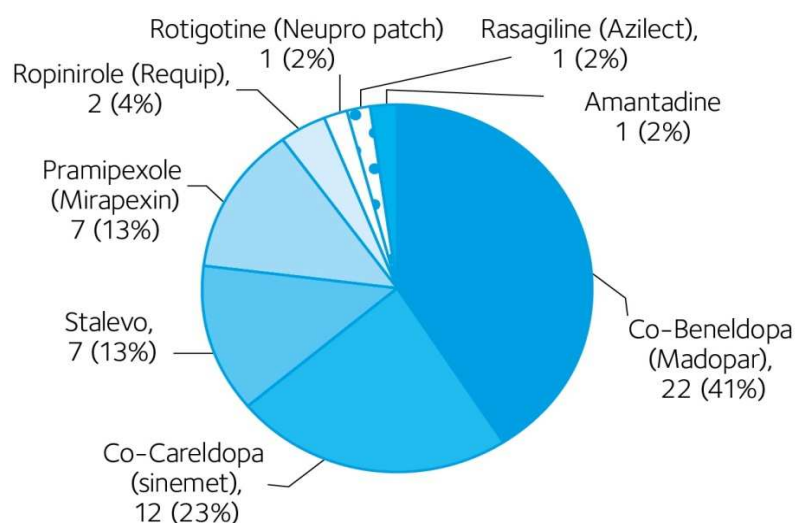


In total, 277 doses were recorded across the 223 patient case notes audited. The higher number of doses than patients can be explained by the fact that people with Parkinson's can be on multiple drugs. Of the 277, 133 (48%) gave reasons for the missed or omitted doses.

Key points

- The most common reason for missed doses was that the drug was not available.
- Nil by mouth is also a common reason for missed doses, despite the fact that there are alternative ways to administer Parkinson's drugs.

Figure 12 - drugs most commonly unavailable when needed, causing the patient to miss or receive a delayed dose



Key points

- 22 (41%) of the 53 missed/delayed doses were directly relating to Co-beneldopa (Madopar) being unavailable.
- The drugs which were most unavailable were those that are most commonly used in the treatment of Parkinson's.

Results from the audit questions for health trusts

Four out of the five trusts who completed the audit tool answered questions about their policies on Parkinson's medication (see Appendix 2).

Results from the organisational section of the audit show the following:

- Two trusts had a medicine reconciliation policy, whereas two did not.
- One of the two trusts that do not have a medicine reconciliation policy in place has one currently being drafted. They hope this will be in place later in 2013.
- One trust noted that taking their patient's drug history is included within their Medicines Code and Foundation Year 1 induction.
- None of the four trusts had a patient self-medication policy in place, but two noted that a policy is in the process of being developed.
- Three of the four trusts have a standard system in place for collecting and documenting information about their patient's current medication. The trust that does not have a system in place noted that different documentation is in use in different directorates for the same purpose.
- All four trusts said that Parkinson's medicines are included in a list of critical medicines where timelines of administration is crucial.
- Three of the four trusts also indicated that they have a system in place for the supply of Parkinson's medication in and out of hours.
- The trust that does not have this system in place noted that there is a limited supply of Parkinson's drugs in A&E.
- All four trusts had taken part in education initiatives – two in conjunction with Parkinson's nurses and two as part of pharmacy initiatives.

Conclusions

Key Findings

- More than 1,500 people with Parkinson's were admitted to hospital in Northern Ireland in 2011.
- 69% of patients with Parkinson's were admitted for a reason not specific to their condition and were admitted to a variety of wards.
- 108 patients had neither the time of their arrival at hospital nor the time of their admission recorded.
- We are unable to comment on how soon after patients were admitted that their drug history was taken. This is because the time this was written on the Kardex was only recorded for two of the 223 patients audited.
- 49% of patients admitted did not have their drug history checked by a pharmacist.
- Only 2% of patients were assessed for their ability to self-medicate.
- None of the four trusts that completed the organisation section of the audit currently has a policy of self-medication for patients with Parkinson's, although this is being discussed in two trust areas.
- 59% of the patient case notes audited showed that the patient did not receive their medication on time during their hospital stay but this figure may include cases where there was a limited delay and the audit did not assess clinical impact.
- 63% of drug histories recorded did not specify the administration times of Parkinson's medication.
- All four trusts who responded included Parkinson's medication in a list of critical medication where timelines of administration is crucial.
- Of the 133 instances where a reason for a delay or missed dose was noted on the data form, 39% was due to the drug being unavailable. Three trusts reported that work is ongoing to ensure supply of critical medications, including Parkinson's medication.
- Of the 133 instances where a reason for dose omission/delay was given, 15% recorded that the patient was assessed as nil by mouth.
- Two of the four trusts who responded currently have a medication reconciliation policy. One other trust has a policy in draft format.
- All four trusts had undertaken education initiatives in relation to Parkinson's. In two cases these were in conjunction with the Parkinson's nurses and in the other two as a result of pharmacy initiatives.

NICE guidelines

NICE Guidelines *Parkinson's disease Diagnosis and Management in primary and secondary care*, adopted in Northern Ireland in 2007 states that:^x

1. To avoid the potential for acute akinesia or neuroleptic malignant syndrome, do not:
 - Withdraw antiparkinsonian medication abruptly
 - Allow medication to fail suddenly due to poor absorption (for example, gastroenteritis, abdominal surgery).
 -
2. The practice of 'drug holidays' should not be undertaken because of the risk of neuroleptic malignant syndrome.
3. People with Parkinson's admitted to hospital or care homes should have their medication:
 - Given at appropriate times, which in some cases may mean allowing self-medication
 - Adjusted by, or adjusted only after discussion with, a specialist in managing Parkinson's.

Recommendations

All trusts should make it a priority to put guidelines in place in relation to the timing of Parkinson's medication. These guidelines should ensure fair, safe and consistent practice and help trusts to meet the NICE guidelines.

These regional guidelines should address the following:

- Health & social care trusts should review the availability of Parkinson's medication to make sure they are readily available both in and out of hours in all hospitals. Also, a patient's medication should follow the patient if they are transferred to any other part of the hospital during their stay.
- Self-medication policies should be developed to ensure those patients who are competent to self-medicate are able to do so.
- Policies should be in place in each trust to ensure accurate and timely medicines reconciliation on admission to hospital by medical and pharmacy staff.
- Ensure that drug histories also include administering times.
- People affected by Parkinson's should be involved to ensure accurate and timely medicines management in hospital.
- Nil by mouth guidelines for Parkinson's medication should be developed and implemented.
- Staff should be given training on the importance of timing in Parkinson's medication and the individual medicines regimes of patients with Parkinson's.

A regional guideline for Parkinson's medication management should be developed.

Drug availability

All trusts should ensure that Parkinson's medication is available and accessible in an emergency. Some trusts have implemented changes in this area and best practice models should become practice across all trusts. Results from the audit found that the common medications prescribed for Parkinson's were not available.

Self-medication

This should be looked at routinely for patients with Parkinson's. Where patients are assessed as suitable, they should be allowed to self-medicate. All trusts need to communicate accurate information to their patients about their medication drugs policies and the need for medication to be brought to hospital in a suitable format. Best practice currently in place should be implemented across all trusts.

Recording

There should be an accurate and timely recording of drug history by a pharmacist on the Kardex. This would ensure adherence to the individual drug regime of people with Parkinson's. In this audit the time the Kardex was written up was recorded in only two cases.

Patient involvement

Patients and carers should be included in the accurate recording and administration of individual medication regimes.

Nil by mouth

The audit showed that 15% of medication doses missed were because the patient was nil by mouth. Best practice guidelines in relation to nil by mouth should be adopted by all trusts to limit missed medication doses for this reason. Parkinson's UK is producing 'nil by mouth' guidelines to be published later this year referencing the work of the Royal College of Physicians.

Staff training

All trusts that responded to the questions about hospital policies had Parkinson's medication listed as a critical medication where timing is crucial. But not all patients receive their medication on time. Parkinson's patients can be admitted to any hospital department, therefore all staff require to have training on the importance of medication timing. Parkinson's UK has resources related to the 'Get It on Time' campaign that should be accessed for training purposes.

Actions

- Report launch event to be held on 19 April 2013.
- Audit results and recommendations to be disseminated to key stakeholders for discussion and action.
- Audit results and recommendations to be disseminated to relevant health & social care professionals.
- Application to GAIN to set up a working group to look at the development of regional guideline.
- Re-audit in 24 months to assess improvements in medicine management of Parkinson's patients.
- Share good practice that has been, and is continuing to be, developed in trusts to achieve regional consistency.

Appendix 1: Acknowledgements

Project Steering Group

Name	Job Title/Specialty	Trust	Role within Project (data collection, Supervisor etc)
Nicola Moore	Manager Parkinson's UK		Steering Group Chair
Esther McQuillan	Influence and Service Development Officer Parkinson's UK		Lead for GAIN Audit
Nuala Campbell	Education and Training Officer Parkinson's UK		Adviser on Training issues
Kathleen McKeown	Champion for GIOT Parkinson's UK	Northern	Service Users' perspective
Seamus Kearney	Neurologist	Belfast	Delivery and Implementation
Catherine Hinton	Retired Nursing Officer		Adviser on Nursing issues
Caroline McMahon	Parkinson's Specialist Nurse	Western	Delivery and implementation
Laura Stoops	Data Analyst		Data Collection and analysis & Report Writing
Erika Hughes	Patient Safety Pharmacist	South Eastern	Delivery and implementation
Wendy Longshawe/ Marion Orr	Locality Manager Physical Health and Disability/MS nurse specialist	Northern	Delivery and implementation
Avril Redmond	Professional lead for Nursing medicine and Unscheduled Care	Northern	Delivery and implementation
Fintan McErlean	Audit Manager	Belfast	Data Collection
Paul McElwee	Ward Manager	Western	Delivery and Implementation
Liz Campbell	Safe and Effective Care Manager	South Eastern	Delivery and implementation

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Anne Quinn, Southern HSC Trust

Sharon Thompson, South Eastern HSC Trust

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Dr Fintan McMorro, Foundation year doctor

Dr Sean O'Reilly, Foundation year doctor

Dr Samantha Russell, Foundation year doctor

Southern Trust

Dr Aileen McSorley, Specialist Registrar in Medicine for the Elderly

Shona Daly, Pre-Registration Pharmacist

South Eastern Trust

Dr Charlie Ong, Associate Specialist, Elderly Medicine

Erika Hughes, Patient Safety Pharmacist

Dr Maeve Boyle, Foundation year doctor

Dr Kathryn Ferris, Foundation year doctor

Dr Claire Forde, Foundation year doctor

Dr Man Chi Lau, Foundation year doctor

Dr Louise Miskelly, Foundation year doctor

Northern Trust

Dr Mark Bowman, CT1 Medicine

Dr Claire Alcorn, Foundation year doctor

Dr Ryan Murray, Foundation year doctor

Medical and pharmacy staff

For recruiting volunteers:

Dr David Craig

Dr Karen McKnight

Dr Seamus Kearney

Jillian Redpath, Pharmacist

Erika Hughes, Pharmacist

Brendan Moore, Pharmacist

Parkinson's UK Professional Engagement and Education team and Resources and Diversity team - For help in the production of the report

Appendix 2: Audit questions for health trusts

Section 1 – Trust wide questions			
This section contains question that relate to the whole trust.			
Please answer questions by choosing answer Yes or No and comment where appropriate.	Yes	No	Comments:
1. Does your Trust have a policy for medicines reconciliation?			
2. Does your Trust have a policy for patients' self medication?			
3. Is there a standard system in place for collecting and documenting information about patients current medication?			
4. Are Parkinson's medicines included in a list of critical medicines where timelines of administration is crucial?			
5. Is there system in place for the supply of Parkinson's medication within and out of hours?			
6. Have there been any education initiatives covering Parkinson's undertaken in wards admitting Parkinson's patients?			

Appendix 3: Parkinson's Medicine Management Audit Tool

PARKINSON'S^{UK} CHANGE ATTITUDES. FIND A CURE. JOIN US.

Generic_Header_a

Parkinson's (Get it on Time) hospital medicines management audit

Please use one column for each patient.

Please refer to the guidance notes for the completion of the form.

For further assistance with completing this form, please contact Laura Stoops at laura_c_26@btinternet.com



No	Subject	Patient 1	Patient 2	Patient 3	Patient 4
1	Name of hospital				
	If other (please specify)				
2	Gender				
3	Age (in years)				
4	Date of initial presentation at hospital				
	Time of initial presentation at hospital (24hr clock)				
5	Date of admission to hospital				
	Time of admission to hospital (24hr clock)				
6	Speciality admitted to				
7	Diagnosis				
8	Admission related to Parkinson's Disease?				
9	Total length of stay in days				
10	Drug history, recorded by				
	If other, please specify				
	Verified by a Pharmacist?				
	Comments				
11	Source of drug history				
	Patient				
	Times of drug administration specified 12/24 hour				
	Carer				
	Times of drug administration specified 12/24 hour				
	GP				
	Times of drug administration specified 12/24 hour				
	Nursing Home				
	Times of drug administration specified 12/24 hour				
	PODs				
	Times of drug administration specified 12/24 hour				

	Other				
	If other, please specify				
	Times of drug administration specified 12/24 hour				
	Not Recorded				
	If yes, are accurate drug times recorded on kardex				
	If no, please give details				
12	Did patient bring own drugs into hospital				
	If yes, were PODs used during hospital stay				
	If no, was a reason recorded				
	Give details				
	If yes, were PODs used as part of a medicines management scheme				
13	Kardex written by				
	If other, please specify				
	Date Kardex written				
	Time Kardex written (24hr clock)				
	Was the date and time the kardex was written, recorded?				
	Is there evidence the Kardex has been checked by a pharmacist				
14	Parkinson's Drug Therapy: Delays & Omissions				
	Co-beneldopa (Madopar)				
	Was the drug delayed or omitted?				
	Total number of doses per day				
	First Dose Delayed				
	Reasons for dose omissions (Please select reason from drop down list)				
	If other, please specify				
	Co-careldopa (Sinemet)				
	Was the drug delayed or omitted?				
	Total number of doses per day				
	First Dose Delayed				
	Reasons for dose omissions (Please select reason from drop down list)				
	If other, please specify				
	Stalevo				
	Was the drug delayed or omitted?				
	Total number of doses per day				
	First Dose Delayed				
	Reasons for dose omissions (Please select reason from drop down list)				

	If other, please specify				
	Entacapone (Comtess)				
	Was the drug delayed or omitted?				
	Total number of doses per day				
	First Dose Delayed				
	Reasons for dose omissions (Please select reason from drop down list)				
	If other, please specify				
	Pramipexole (Mirapexin)				
	Was the drug delayed or omitted?				
	Total number of doses per day				
	First Dose Delayed				
	Reasons for dose omissions (Please select reason from drop down list)				
	If other, please specify				
	Pramipexole prolonged release				
	Was the drug delayed or omitted?				
	Total number of doses per day				
	First Dose Delayed				
	Reasons for dose omissions (Please select reason from drop down list)				
	If other, please specify				
	Ropinirole (Requip)				
	Was the drug delayed or omitted?				
	Total number of doses per day				
	First Dose Delayed				
	Reasons for dose omissions (Please select reason from drop down list)				
	If other, please specify				
	Ropinirole (Requip XL)				
	Was the drug delayed or omitted?				
	Total number of doses per day				
	First Dose Delayed				
	Reasons for dose omissions (Please select reason from drop down list)				
	If other, please specify				
	Rotigotine (Neupro patch)				
	Was the drug delayed or omitted?				
	Total number of doses per day				
	First Dose Delayed				

Reasons for dose omissions (Please select reason from drop down list)				
If other, please specify				
Rasagiline (Azilect)				
Was the drug delayed or omitted?				
Total number of doses per day				
First Dose Delayed				
Reasons for dose omissions (Please select reason from drop down list)				
If other, please specify				
Apomorphine				
Was the drug delayed or omitted?				
Total number of doses per day				
First Dose Delayed				
Reasons for dose omissions (Please select reason from drop down list)				
If other, please specify				
Other Drug (please specify)				
Was the drug delayed or omitted?				
Total number of doses per day				
First Dose Delayed				
Reasons for dose omissions (Please select reason from drop down list)				
If other, please specify				
Other Drug (please specify)				
Was the drug delayed or omitted?				
Total number of doses per day				
First Dose Delayed				
Reasons for dose omissions (Please select reason from drop down list)				
If other, please specify				
Other Drug (please specify)				
Was the drug delayed or omitted?				
Total number of doses per day				
First Dose Delayed				
Reasons for dose omissions (Please select reason from drop down list)				
If other, please specify				
Other Drug (please specify)				
Was the drug delayed or omitted?				

	Total number of doses per day				
	First Dose Delayed				
	Reasons for dose omissions (Please select reason from drop down list)				
	If other, please specify				
	Other Drug (please specify)				
	Was the drug delayed or omitted?				
	Total number of doses per day				
	First Dose Delayed				
	Reasons for dose omissions (Please select reason from drop down list)				
	If other, please specify				
15	Were any contraindicated medicines prescribed?				
	If other, please specify				
16	Were there any incidents that related to the clinical management or safety of the patient?				
	Nature of incident				
	Was an incident report made?				
	Comments				
17	Was the patient assessed for the ability to self medicate?				
	If yes, was the patient considered competent to self medicate?				
	If yes, did the patient self medicate?				
	Comments				
18	Any other general comments relating to medicines and the patient				

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