Leukaemia UK

End the delays in leukaemia diagnosis

1 IN 4
COUNT US IN

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Professor Alex Smith

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"This study provides novel insights into the diagnosis of leukaemia, clearly demonstrating that avoidable delays occur at multiple points across the healthcare system. Crucially, this is true for both acute and chronic leukaemia types, with particularly important implications for acute myeloid leukaemia. These new findings are vital for driving improvements in earlier and faster diagnosis, which will not only benefit patients but also improve the efficiency of the NHS. I'm delighted to have supported Leukaemia UK throughout the development and delivery of this work, and I look forward to continuing our collaboration."

Dr Pramila Krishnamurthy

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"Acute myeloid leukaemia has one of the lowest five–year survival rates among all cancers. A high risk of early death makes prompt diagnosis absolutely critical. This study is a powerful reminder of the urgency to diagnose leukaemia earlier. The report offers important new findings and practical recommendations that can help make earlier leukaemia diagnosis a reality. I was pleased to contribute to the scope and design of the study and to provide clinical input in shaping the insights it has delivered."

Dr Anjum Khan

Consultant Haematologist
Leeds Teaching Hospitals NHS Trust

"Every minute counts when it comes to recognising acute myeloid leukaemia – delays can have a serious impact on a patient's chance of survival. This study provides vital evidence of where those delays are happening and how we can address them. Having seen the impact of delayed diagnosis I fully support this important work. Getting the basics right, including urgent blood testing, is crucial to improving patient outcomes."

Dr Piers Patten

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"Chronic Lymphocyte leukaemia (CLL) is often described as a 'slow-burn' leukaemia, but this report shows that delays and missed opportunities can still occur and they matter. Many people are first flagged through a routine blood test, and what happens next depends too much on local processes and capacity. A timely Full Blood Count, prompt review of abnormal results and clear routes into specialist haematology can prevent people waiting for answers, reduce anxiety, and ensure those who need treatment start it at the right time. This evidence is an important step towards a more consistent, system-wide approach to earlier diagnosis and faster escalation for CLL."

Dr Anthony Cunliffe

General Practitioner
Macmillan National Lead Medical Adviser
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"This study provides valuable new insights into the diagnosis of leukaemia, showing that avoidable delays happen at multiple points across the healthcare system, including in general practice. As a GP, I know how critical it is to have the right tools and clear guidance to support timely decisions, especially around referring patients for Full Blood Counts. Earlier and faster diagnosis, particularly for acute myeloid leukaemia, can make a real difference to patient outcomes and NHS efficiency. I'm proud to have supported Leukaemia UK in developing and delivering this work, and I look forward to continuing working with the team."

Foreword

One in four people with leukaemia face avoidable delays in diagnosis. Delays that change lives and, in too many cases, cost them. While emergency diagnosis can be appropriate for some, our evidence shows that many people diagnosed in emergency settings had earlier missed opportunities, when leukaemia could have been identified.

These are not failures of individuals, but failures of the system. Only urgent, system-wide change can put this right.

The National Cancer Plan for England marks the most significant moment for leukaemia policy in more than a decade. For the first time, leukaemia is meaningfully embedded within a national strategy, and the introduction of an early-diagnosis metric for non-stageable cancers creates a real opportunity to improve outcomes.

But recognition is only the first step. Action is what will save lives. Turning national commitments into real-world change requires clear leadership from the Government to ensure early diagnosis ambitions are implemented consistently and at pace across the system.

Too many people still wait far too long for a Full Blood Count, a simple, quick and inexpensive test that can provide the first indication of leukaemia or help rule it out. No one should be reaching crisis point in A&E for such a basic test. Improving timely access to Full Blood Count testing is one of the most effective ways to achieve earlier diagnosis and save lives.

Our evidence shows that avoidable delays occur at multiple points along the diagnostic pathway. Addressing them requires coordinated national action that local systems cannot deliver alone.

Three systemwide improvements are essential that we call on the Government to deliver:

1. **Faster access to Full Blood Count testing** so a simple, lifesaving test is not delayed by unclear guidance, capacity constraints or local variation.
2. **Addressing avoidable delays in diagnosis, including those leading to emergency presentation,** by ensuring symptoms are consistently recognised, recorded and escalated across primary and emergency care.
3. **Access to specialist haematology care at the right time,** through full and consistent implementation of the leukaemia Best Practice Timed Pathway.

These actions are not new ambitions. They are essential to delivering the commitments already set out in the National Cancer Plan for England. Without them, progress on early diagnosis for non-stageable cancers will remain uneven and unaccountable.

Now the Government must lead the shift from commitment to delivery, providing the direction, investment and accountability needed to ensure earlier and better diagnosis for everyone with leukaemia.

Let's make this moment count. Count Us In to End the Delay and Save Lives.

Fiona Hazell

Chief Executive, Leukaemia UK

> "I was dismissed, belittled and treated like a nuisance."

Jade Horsman

Diagnosed with B-ALL in March 2021

For seven months, 29-year-old Jade repeatedly sought help for worsening symptoms. Extreme fatigue, night sweats, fevers, headaches and a persistent tooth infection that three courses of antibiotics failed to resolve. Despite multiple GP appointments, three A&E visits, and even calls to 999, she was continually misdiagnosed and sent away.

Her symptoms were attributed first to stress, then hormones, then sinus infection. Even when she begged for a blood test in A&E, she was initially reassured that *"the antibiotics would kick in soon"*. In her third A&E visit, Jade had sepsis and only at that point had a Full Blood Count that diagnosed leukaemia.

After seven months of feeling unwell, Jade was finally diagnosed with B-cell Acute Lymphoblastic Leukaemia (B-ALL). She describes feeling an unexpected sense of relief, not at the diagnosis, but finally being taken seriously after months of deterioration. After initially being told by paramedics that she has a headache and to take paracetamol, her final A&E visit led to a three-month stay in hospital to begin urgent treatment - and this was only the start of a long and difficult experience.

Jade worries for those who cannot advocate for themselves as she did: *"I had every privilege on my side. I worry for those who don't. What happens to them?"*.

Introduction

Every year, around 10,000 people in England are told they have leukaemia.

Yet the steps towards diagnosis are often shaped by how the health system recognises, responds to and escalates people's symptoms.

New evidence commissioned by Leukaemia UK shows that 1 in 4 people with leukaemia face avoidable delays in diagnosis, often because simple steps like ordering a Full Blood Count or escalation of abnormal tests to specialist care did not happen early enough.[1]

At the same time, more than a third of leukaemia patients are diagnosed in emergency settings, one of the highest rates across all cancers. Many of these emergencies were preceded by earlier opportunities to be diagnosed sooner.

These delays are not always inevitable. They are often systemic issues that can be changed. But recognition alone will not save lives. Turning this moment into meaningful change requires action.

What leukaemia is and why early diagnosis matters

Leukaemia is not one disease. There are multiple types, each differently affecting how the body makes blood cells and how rapidly the disease develops.

Four main types shape the majority of leukaemia cases in England:[2]

- **Acute Myeloid Leukaemia (AML)** affecting 2,463 every year.
- **Acute Lymphoblastic Leukaemia (ALL)** affecting 775 every year.
- **Chronic Myeloid Leukaemia (CML)** affecting 795 every year.
- **Chronic Lymphocytic Leukaemia (CLL)** affecting 4,074 every year.

Leukaemia affects people of all ages. It is the most common cancer in children and increasingly common in older adults. Across all types, only around half of people survive five years after diagnosis, and for AML the survival rate is just 22%.[3]

Early diagnosis can improve survival, enable safer treatment, avoid emergency presentation, and reduce crisis-driven hospital stays. It can also support more consistent access to specialist haematology input at the right time.

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1. Leukaemia UK, Count Us In report, September 2025
2. NHS Digital, Cancer Registration Statistics, England, 2023 (accessed on 30th March 2026)
3. National Disease Registration Service, Detailed Statistics, Get Data Out programme (accessed 30th March 2026)

A pivotal policy moment

The new National Cancer Plan for England marks a major shift for leukaemia and other blood cancers.[4] For the first time, cancers that cannot be staged, including all leukaemia types, are explicitly embedded within national early-diagnosis commitments. The introduction of a national emergency diagnosis metric means leukaemia diagnosis will finally be monitored and improved alongside other cancers.

Three elements of the plan create a unique opportunity:

1. **A new early diagnosis metric for non-stageable cancers.**
2. **Better GP support and diagnostic tools.**
3. **Expanded diagnostic capacity through Community Diagnostic Centres.**

This provides a strong policy foundation. The challenge is now delivery.

> *I saw my GP several times over months with symptoms including bone pain, exhaustion, bruising and mouth ulcers. I wasn't offered a Full Blood Count test and was told it was rheumatoid arthritis, but the medication didn't help. It wasn't until I fainted and ended up in A&E two months later that I was finally diagnosed with acute myeloid leukaemia (AML). Better symptom awareness among GPs and faster access to Full Blood Counts is critical to diagnose leukaemia earlier and saves lives.*
>
> Tracey Palmer-Hole
> **Diagnosed with AML in June 2019**

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4. The National Cancer Plan: what does it mean for people with leukaemia?, Leukaemia UK, February 2026
5. Leukaemia UK and Leukaemia Care survey September 2024
6. Leukaemia UK patient survey in February 2024

Why improvements in early diagnosis of leukaemia are needed

Early diagnosis is one of the most powerful determinants of cancer outcomes, yet this is still not being achieved for many people with leukaemia. Leukaemia often presents with vague, non-specific symptoms such as fatigue, repeated infections and unexplained bleeding or bruising which are easily mistaken for minor illnesses. Public awareness is extremely low: only 14% of people can name the four most common symptoms, limiting timely help-seeking.[5]

The challenges continue in primary care. For fast-progressing acute leukaemia types, symptoms can escalate rapidly and emergency diagnosis is common. While some emergencies are unavoidable, patient stories reveal repeated GP consultations without being offered a Full Blood Count, a simple, inexpensive test that can rapidly indicate or rule out leukaemia.

Evidence confirms these delays. A survey of nearly 300 patients from Leukaemia UK[6] found that half waited a week or more after reporting symptoms before receiving Full Blood Count testing, far beyond the 48-hour timeframe recommended in national clinical guidelines.[7] A 2024 poll of 1,000 GPs identified diagnostic capacity issues, from phlebotomy staffing to sample processing as the main reason Full Blood Count tests are delayed.[8]

National initiatives such as Non-Specific Symptom (NSS) pathways and Community Diagnostic Centres (CDCs) have expanded access to diagnostics. However, policy and performance metrics have not kept pace with the needs of non-stageable cancers such as leukaemia.

The National Cancer Plan has been a monumental moment for leukaemia and other non-stageable cancers. The ambition of the plan to ensure that 3 out of 4 people diagnosed with cancer live either cancer-free or living well with cancer after 5 years by 2035 will not be met if earlier diagnosis for leukaemia and other blood cancers is not improved.[9]

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7. Overview | Suspected cancer: recognition and referral | Guidance | NICE
8. Savanta conducted a poll of 1000 GPs on behalf of Leukaemia UK and Leukaemia Care charities in July 2024
9. National Cancer Plan for England

Analysing records of over 12,700 leukaemia patients

Currently, there is lack of evidence and understanding of where barriers and opportunities are to drive earlier and better diagnosis of leukaemia. To address this evidence gap, Leukaemia UK, commissioned a comprehensive analysis of real-world NHS data.[10]

This study examined over 12,700 patients diagnosed with leukaemia in England between April 2015 and March 2023, excluding the two pandemic years (April 2020 to March 2022) to avoid the confounding effects of COVID-19 on diagnosis patterns. Multiple datasets were used to capture the full diagnostic journey of patients with leukaemia. Primary care records were obtained from the Clinical Practice Research Datalink (CPRD Aurum), which provided information on GP contacts, coded symptoms, blood test requests, and referrals.[11] Hospital Episode Statistics (HES) were used to capture inpatient and outpatient admissions, emergency attendances, and relevant procedures in secondary care.[12] Cancer registration data from the National Disease Registration Service (NDRS) enabled the confirmation of diagnosis and classification of subtypes using ICD-10 codes.[13] Finally, mortality outcomes were obtained from the Office for National Statistics (ONS), which supplied date and cause of death, allowing us to conduct detailed survival analysis.[14]

By analysing diagnostic routes, timelines and outcomes, the study identified where delays occurred and highlighted systemic failings that led to avoidable delays in diagnosis. The findings revealed a diagnostic pathway characterised by missed opportunities and structural barriers, reinforcing the urgent need to deliver on the new national commitments.

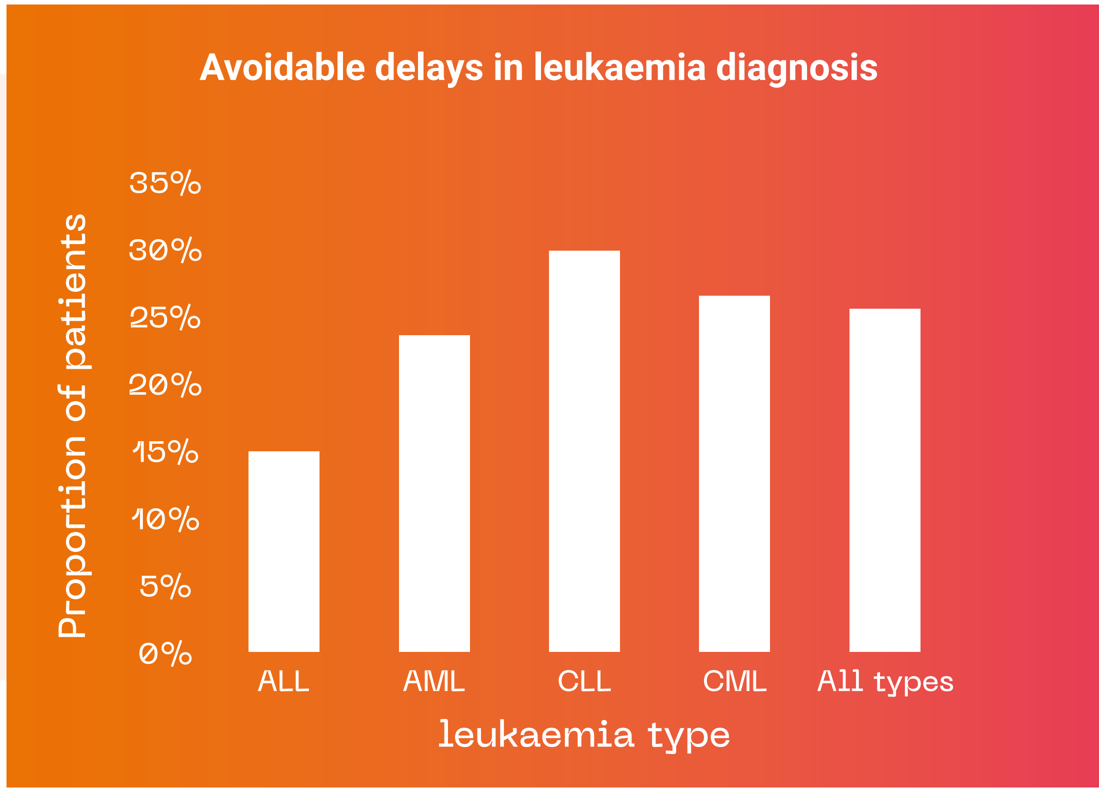
Avoidable delays in leukaemia

The study found that one in four patients experience avoidable delays in the diagnostic pathway based on seven criteria defined by clinical experts (**Appendix 1**).

These delays occurred in both primary and secondary care settings and across all four main leukaemia types, reflecting the broader system challenges that shape a leukaemia diagnosis.

1 in 4

face avoidable delays in leukaemia diagnosis



This graph shows avoidable delays in leukaemia diagnosis based on seven criteria across primary and secondary care as agreed by clinical experts. Data is captured for the four main leukaemia types and all leukaemia types combined.

For AML, delays typically reflected multiple GP appointments or abnormal blood tests that were not escalated promptly. In contrast, delays for patients with CLL or CML were more frequently associated with slow escalation, following outpatient or elective interactions, reflecting the less urgent clinical presentation of the chronic subtypes.

Although these patterns differ by leukaemia type, the overall picture was clear: **delays were found at numerous points in the pathway, with no single intervention sufficient to address them in isolation.**

Proportion of leukaemia patients with avoidable delays in diagnosis

	All avoidable delays	Primary care delays	Secondary care delays
ALL	15%	11%	4%
AML	24%	15%	11%
CLL	30%	16%	17%
CML	27%	15%	15%
All types	**25%**	**15%**	**13%**

This table shows a breakdown of leukaemia delays in diagnosis across primary and secondary care and broken down by leukaemia type.

Some patients experienced avoidable delays in both primary and secondary care settings.

[10] The Heath Economics Unit hosted by NHS Midlands and Lancashire) conducted the study

[11] Clinical Practice Research Datalink | CPRD

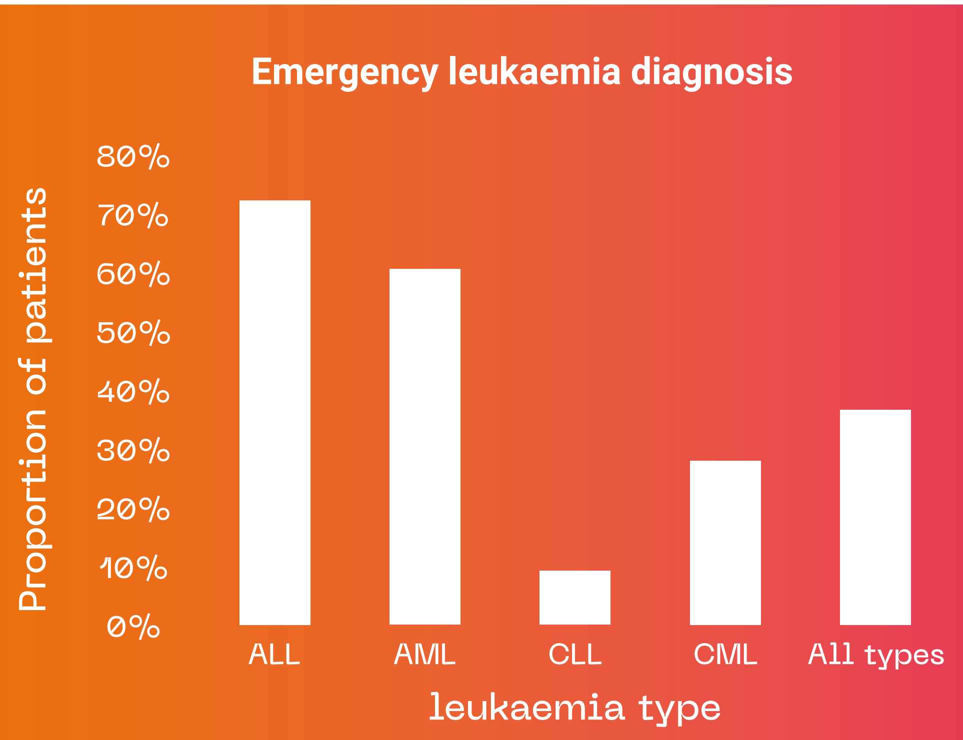
[12] Hospital Episode Statistics (HES) - NHS Digital

[13] National Disease Registration Service - NDRS

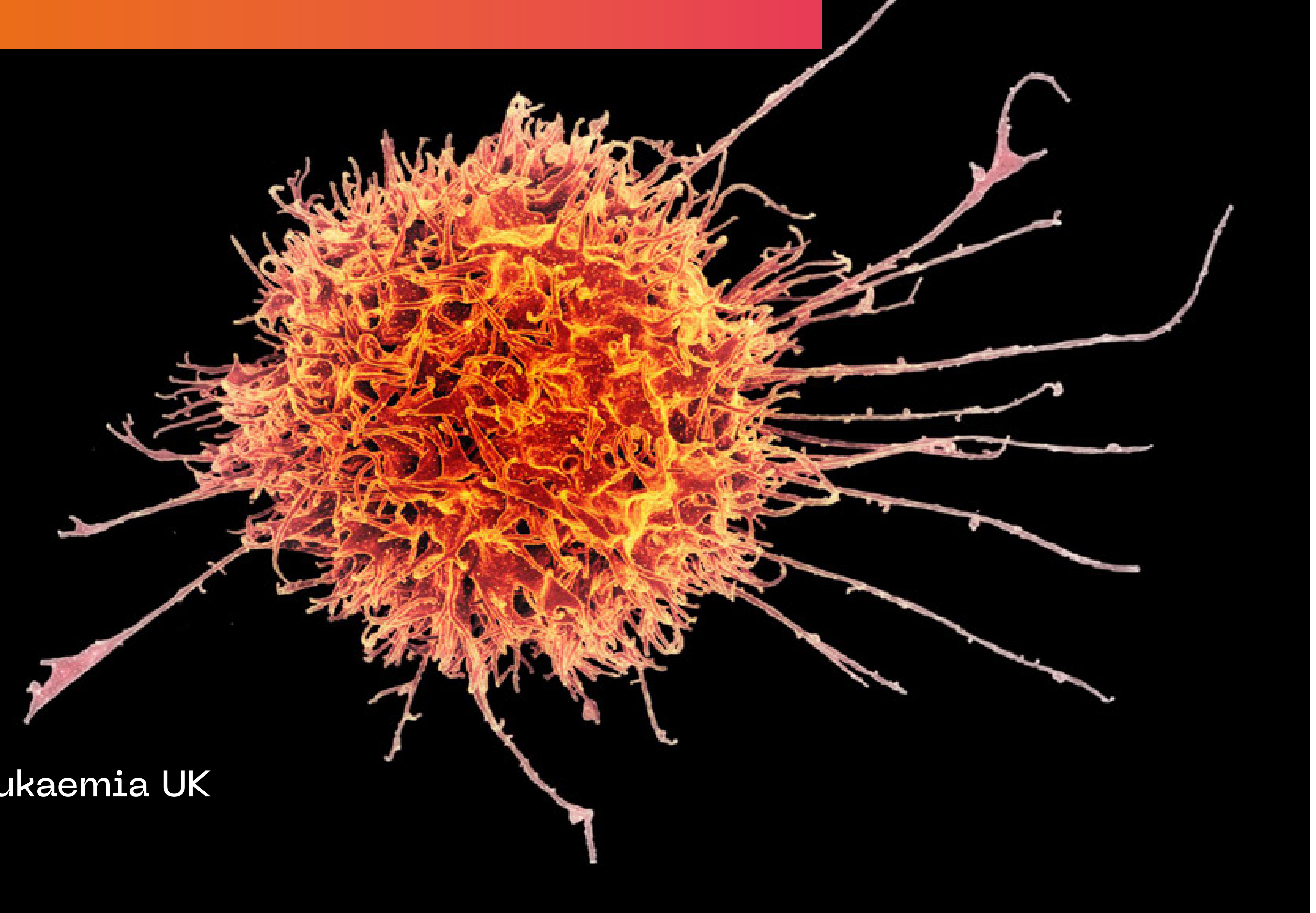
[14] Home - Office for National Statistics

Emergency diagnosis

The data showed that 36% of people with leukaemia are diagnosed in emergency settings, making leukaemia one of the cancers most likely to present through acute hospital routes. This figure was significantly higher for certain subtypes, including ALL, where 72% of cases were diagnosed in emergency settings. High rates of emergency diagnosis were also seen in AML, with more than half of patients receiving their diagnosis after an acute presentation. Emergency diagnosis rates for CLL were low.


Emergency leukaemia diagnosis

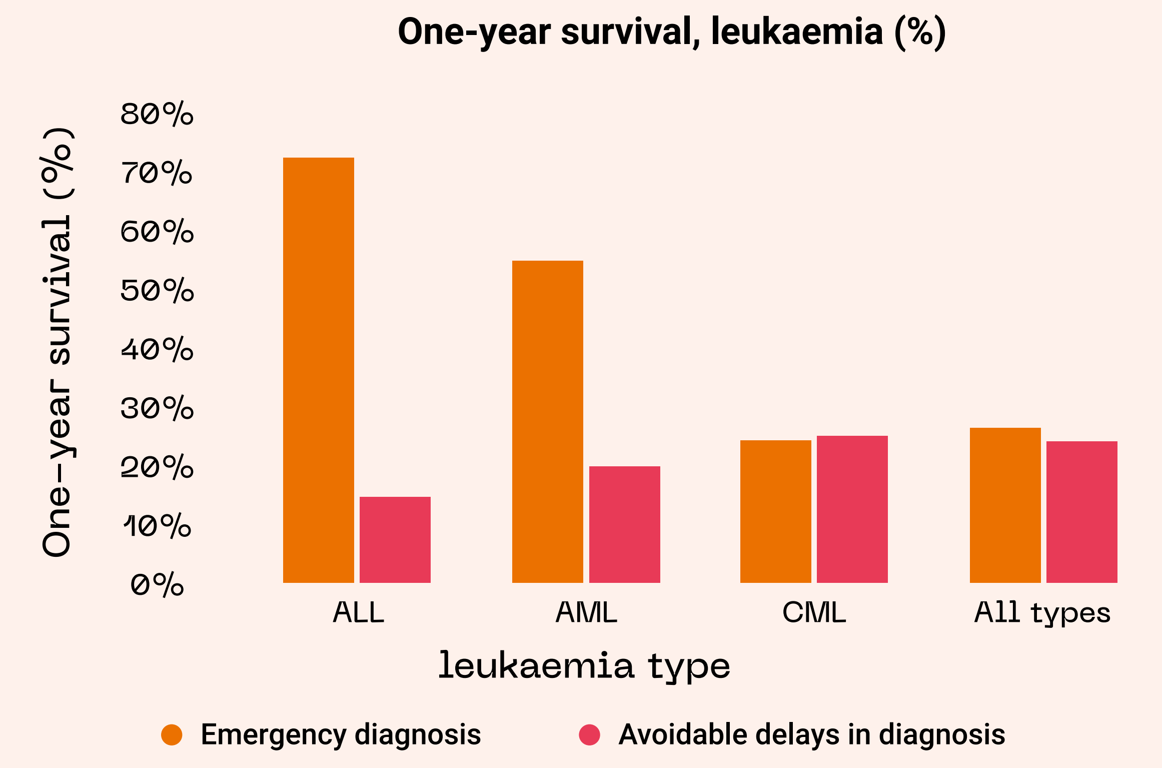
This graph shows proportion of emergency diagnosis for all leukaemia types (36%) and broken down across the main four leukaemia types



Impact on survival

The study confirmed that emergency diagnosis is linked to poor one-year survival. The difference in impact of emergency diagnosis and avoidable delays on survival was a striking finding of the study. While emergency diagnosis is well known to be associated with high early mortality, particularly for acute leukaemia types, the data revealed a distinct and concerning pattern for those who experienced avoidable delays in their diagnosis.

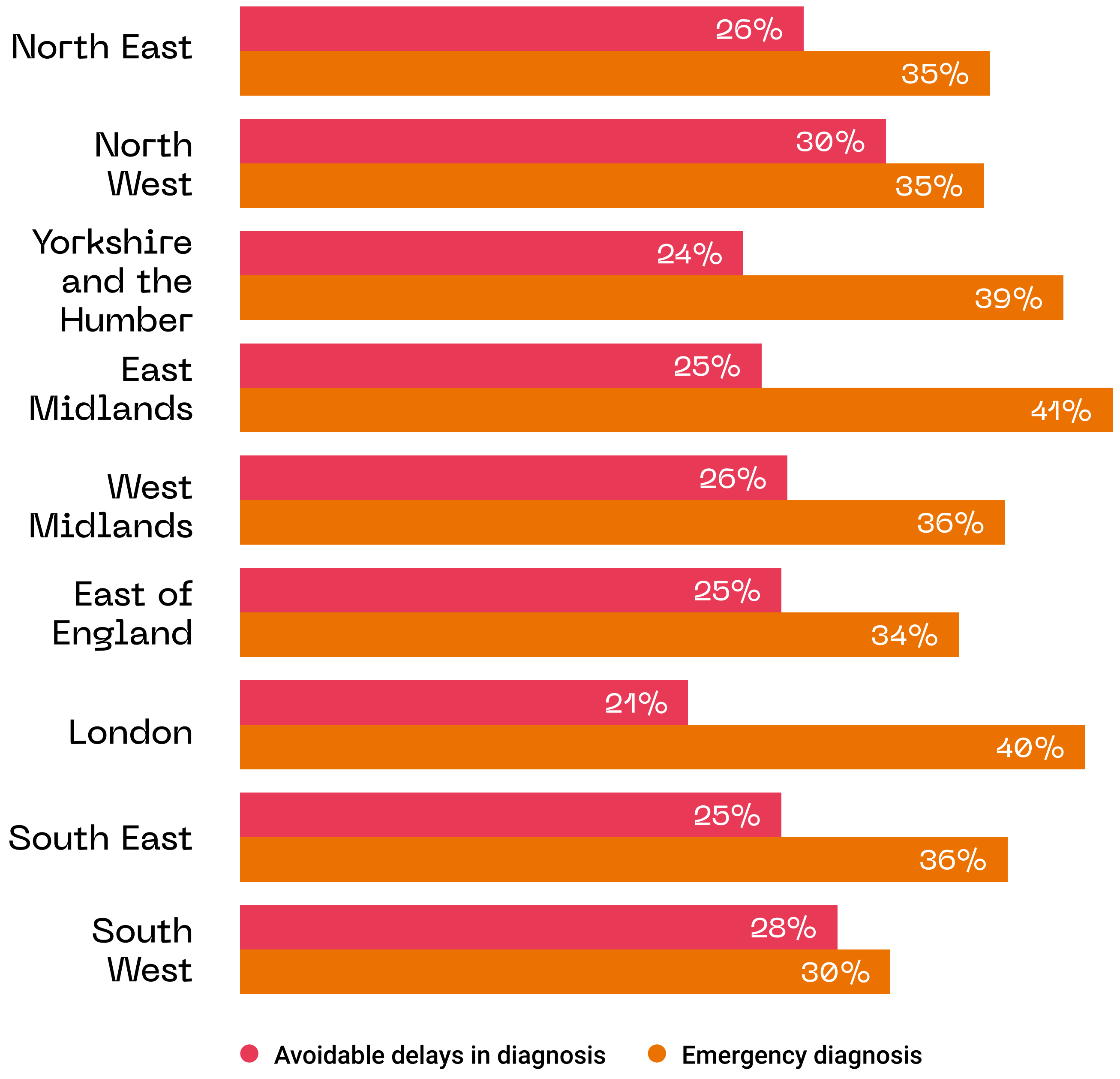
For AML and ALL, one-year survival was lower among patients who experienced avoidable delays than among those who were diagnosed in emergency settings. This suggests that although emergency diasnosis often involves a rapid onset of severe symptoms, avoidable delays in diagnosis can lead to worse outcomes over time. Many of these patients may not appear critically unwell at first, but delays in testing and escalation contribute to poorer long-term survival.


One-year survival, leukaemia (%)

This graph compares one year survival between emergency diagnosis and avoidable delays in diagnosis across ALL, AML and CML and all types combined. Note that because emergency diagnosis of CLL is low, comparison of one-year survival between emergency diagnosis and avoidable delays in diagnosis is not relevant.

Regional variations in leukaemia diagnosis

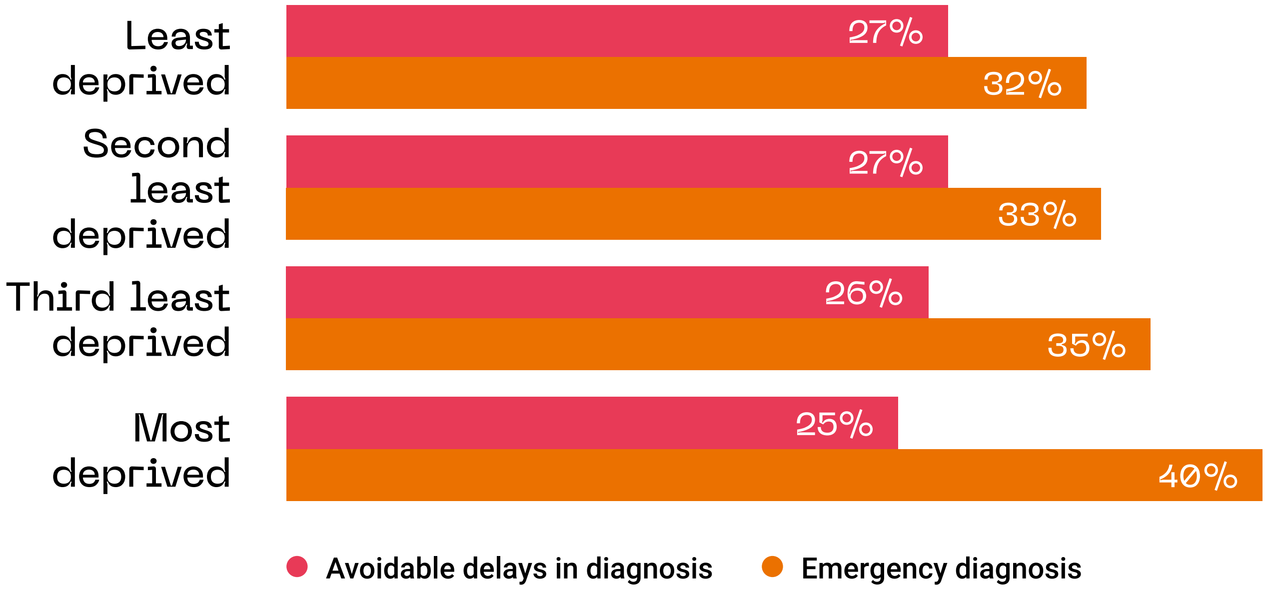
Significant regional variations were observed in the proportion of leukaemia patients who experienced avoidable delays, ranging from 21% in London to 30% in North West of England. Regional variations were also seen among those diagnosed in emergency settings, varying from 30% in South West England to 41% in East Midlands.



This graph shows regional variations of leukaemia patients diagnosis among those with avoidable delays in diagnosis (red) and those with an emergency diagnosis (orange).

Role of deprivation in leukaemia diagnosis

The study also looked if deprivation index is linked to avoidable delays and emergency diagnosis. Avoidable delays in diagnosis were similar within all deprivation groups, whereas emergency diagnosis increased as deprivation increased (from 32% for the least deprived to 40% for most deprived). This confirms national trends, where cancer patients from the most deprived areas are more likely to be diagnosed in emergency settings, with acute leukaemia patients in these areas showing higher emergency diagnosis rates than the all-cancer average within the same deprivation group.[15]



This graph shows links of deprivation to avoidable delays in diagnosis (red) and how deprivation is linked to emergency diagnosis (orange) for people with leukaemia.

Impact on NHS efficiency

The study also examined the impact of avoidable delays on the efficiency of healthcare services, focusing on acute myeloid leukaemia (AML). Patients who experienced delays had more fragmented and reactive care, frequently interacting with multiple parts of the healthcare system without timely referrals or resolution (**Appendix 2**). The economic analysis estimated that 4,100 healthcare interactions could be avoided if delays were reduced by 25%, representing £1.7 million in direct NHS costs within nine months, or more than £11 million over five years. These findings underline the dual rationale for earlier diagnosis: improving patient outcomes and reducing pressure on NHS services.

Together, the evidence paints a clear picture: avoidable delays in leukaemia diagnosis are common, harmful, and costly. But critically, they are also resolvable through targeted system improvements.

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[15] Routes to diagnosis in England

Three system improvements to end avoidable delays in diagnosis

Ending avoidable delays in leukaemia diagnosis requires system level reform across primary care, urgent care, diagnostics and specialist services. While NHS England, Integrated Care Boards, and Cancer Alliances hold many operational levers, Government leadership is essential to set national priorities, mandate consistency, and ensure investment aligns with early diagnosis goals.

The following three improvements combine the evidence on where delays occur with the policy actions needed at both national and local level.

1. Faster access to Full Blood Count testing.
2. Address avoidable delays in diagnosis, including those in emergency settings.
3. Access to specialist haematology care at the right time.

1.

Faster access to Full Blood Count testing

A Full Blood Count is often the earliest and most effective test to indicate or rule out leukaemia, yet many patients do not receive one early enough. Delays arise when an urgent Full blood count isn't ordered the first time a patient reports relevant to leukaemia symptoms, when GPs lack clear triggers for ordering one, or when phlebotomy capacity limits rapid access to this vital test.

Delivering faster access requires strengthened national primary care guidance that sets out clear symptom-based triggers for urgent Full Blood Count testing. This should be supported by digital prompts within primary care systems to highlight repeated presentations or concerning symptoms. Improving phlebotomy capacity, including through Community Diagnostic Centres and Neighbourhood Health Centres, is essential so that urgent Full Blood Count testing can be completed quickly and consistently.

> *I had hundreds of GP and A&E appointments across four years when doctors had not taken the time to look at or listen to the symptoms I was suffering from. I'm so grateful to the new GP who referred me. I don't know if I'd be here if he hadn't gone above and beyond.*
>
> Virginie Liba
> **Diagnosed with CML**
> **in November 2019**

Where Government leadership is needed:

We are asking the Government to take the following actions to ensure timely diagnosis of leukaemia through urgent access to Full Blood Count testing:

1. **Embed urgent access to Full Blood Count testing as a national priority within implementation of the National Cancer Plan, including by:**
    - Committing targeted investment to address phlebotomy workforce constraints.
    - Directing NICE to strengthen national primary care guidance to ensure urgent referrals for Full Blood Count testing.
    - Supporting the rollout of national digital support tools to aid clinical decision-making.

2. **Commit to investment in clinically approved digital prompts within national primary care systems, including shared records such as the Single Patient Record, to:**
    - Flag repeated presentations.
    - Identify combinations of concerning symptoms.
    - Escalate abnormal results that warrant urgent testing or referral.

3. **Ensure access to urgent Full Blood Count testing is reflected in national performance expectations, by:**
    - Including it within relevant NHS oversight and assurance frameworks.
    - Setting clear expectations for Cancer Alliances and Integrated Care Boards to reduce unwarranted regional variation.
    - Translating these expectations into neighbourhood-level delivery through Integrated Neighbourhood Teams and Single Neighbourhood Providers, aligned with community diagnostic and phlebotomy capacity planning.

These actions would provide national leadership, improve consistency of access, and support earlier diagnosis of leukaemia patients across England.

2.

Address avoidable delays in diagnosis, including those in emergency settings

Over a third of leukaemia cases are diagnosed in emergency settings, often following missed opportunities to be diagnosed earlier. For all cancers, emergency presentations account for around 21%.[16] Based on the data of the study we commissioned, the figure rises to 36% for leukaemia, making it one of the cancer types most likely to be diagnosed in emergency settings. This heightened risk means that any national ambition to reduce emergency diagnosis must explicitly account for blood cancers, ensuring that progress is not masked by improvements in cancers with lower emergency diagnosis rates.

Our new findings have identified avoidable delays across the leukaemia cohort, but current data systems do not provide the granularity needed to fully understand what happens in the period before an emergency diagnosis. While data of this study showed that around 75% of patients had at least one GP interaction within a month prior to attending A&E within a month prior to diagnosis, current datasets cannot distinguish:

- **Whether A&E attendance was a GP referral, or**
- **Whether it was a self referral following multiple GP visits without escalation, or**
- **Whether abnormal Full Blood Count test results had been actioned, repeated, or left unaddressed.**

Without this level of detail, national and local systems cannot reliably identify where the real opportunities lie to reduce emergency diagnosis, nor can they evaluate whether changes in practice are making a difference for leukaemia patients. To ensure accountability, emergency diagnosis and avoidable delay metrics must be broken down by cancer type, including all leukaemia types. Without this, improvements made for other cancers risk masking continued high emergency diagnosis rates for blood cancers. Granular reporting will support Cancer Alliances, Integrated Care Boards and Integrated Health Organisations to understand local variation, target interventions, and track progress meaningfully.

Where Government leadership is needed:

We are asking the Government to take action to deliver its commitment to reducing emergency cancer diagnosis, with specific focus on leukaemia.

1. **Set explicit national expectations for reducing emergency diagnosis of leukaemia, by:**
    - Moving beyond aggregate emergency diagnosis data and establishing leukaemia-specific improvement expectations, including clear expectations to reduce inequalities in emergency diagnosis between the most and least deprived groups.
    - Ensuring that existing data is used to understand and address avoidable delays and missed opportunities prior to A&E attendance and diagnosis, with routine stratification by deprivation to identify and address disparities.
2. **Strengthen joined-up data collection and reporting across the patient pathway, including primary care, diagnostics and emergency departments, through:**
    - Enhanced use of shared records such as the Single Patient Record.
    - Systematic identification of repeated presentations, unresolved symptoms and abnormal test results across care settings.
3. **Mandate national support tools and reporting frameworks to enable accountability, including:**
    - Routine reporting of avoidable-delay metrics such as time from first presentation with relevant symptoms to referral and diagnosis by cancer type, including leukaemia.
    - Standardised tools that allow Cancer Alliances and Integrated Care Boards to detect patterns of delay and track improvement over time, particularly in the most deprived communities where rates are highest.

These measures are essential to translate national ambition into practical action, enabling sustained and meaningful reductions in emergency diagnosis for people with leukaemia, particularly in the most deprived areas where rates are highest.

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16. Calculated from National Disease Registration Service, Detailed Statistics, Routes to Diagnosis Data

3.

Access to specialist haematology care at the right time

Specialist review at the right time is critical for diagnosing and managing leukaemia, particularly for acute types where delays of even hours can worsen outcomes. Our evidence shows that some patients wait too long for specialist appointments, particularly when abnormal blood tests are not escalated or when local pathways are unclear.

Ensuring timely escalation requires full adoption of the leukaemia Best Practice Timed Pathway (BPTP) that outlines timelines and support needs by leukaemia type - AML, ALL, CML and CLL. Standardising these timelines across Cancer Alliances will reduce variation and ensure all patients receive the specialist input they need.

> *I went to my GP and asked for a routine blood test. I couldn't get an appointment to find out the results, so the GP told me over the phone the blood tests showed I probably had chronic lymphocytic leukaemia (CLL) and would need to see a haematologist. But it took months before I actually saw a haematologist and I was officially diagnosed with CLL.*
>
> Fiona Whitehouse
> **Diagnosed with CLL in December 2018**

Where Government leadership is needed:

We are asking the Government to provide clear national leadership to ensure consistent and timely access to specialist leukaemia care.

1. **Mandate and resource the national rollout of the leukaemia Best Practice Timed Pathway, by:**
   - Embedding it within national cancer standards.
   - Implementing it consistently across Cancer Alliances.
   - Establishing clear mechanisms to hold systems to account for delivery and outcomes.
2. **Ensure national workforce planning and investment align with pathway requirements, including:**
   - Addressing diagnostic and haematology workforce capacity needed to meet Best Practice Timed Pathway timelines.
   - Supporting clear referral routes and the use of shared digital records to enable timely escalation to specialist review.

Without consistent national leadership on implementation and resourcing, variation in access to specialist care will persist, and timely diagnosis will continue to depend on geography rather than clinical need.

A unified blueprint for delivery with clear national leadership

Taken together, the reforms set out in this report constitute a single, coherent blueprint for reducing avoidable delays in leukaemia diagnosis:

- Faster access to Full Blood Count testing.
- Earlier recognition and escalation of risk before crisis presentation and emergency diagnosis.
- Access to specialist haematology care at the right time when abnormal results are identified.

These are mutually reinforcing system changes that can only be delivered at pace through clear national leadership, mandated expectations and accountability for implementation. The evidence demonstrates that current delays are common, harmful and costly, but also resolvable.

Delivering earlier diagnosis does not require new policy commitments; it requires decisive national action to translate existing ambition into consistent practice. With clear direction and oversight, earlier diagnosis of leukaemia can become the standard across England, improving outcomes for patients while easing pressure on emergency services and making better use of NHS resources.

> *The genius about a blood test is that it can tell you so many things so quickly. There seems to be a blockage. That's what I would love to see, for it to be done on a much more local level, a lot quicker.*
>
> Ian Thomson
> **Diagnosed with AML in June 2019**

1 IN 4
COUNT US IN

End avoidable delays in leukaemia diagnosis, for good.

Appendix 1:

This table outlines the criteria that constitute avoidable delays in diagnosis as agreed by clinical experts. Avoidable delay was counted if a patient met one or more of these criteria.

		Rule	Aims to		Key Criteria
Primary Care Delays	A	Delay after GP presentation with symptoms	Identify delays after first symptom recorded in GP data		**Symptom in GP record but with no record of:** • Blood test or urgent referral from primary care within 14 days • Urgent outpatient appointment within 14 days • Blood test or biopsy in hospital setting within 14 days No same-day emergency admission on the date of symptoms
	B	Delay after abnormal GP blood test	Identify delays after abnormal result in GP data		**Abnormal blood test in GP record but no record of:** • Urgent referral from primary care within 5 days • Urgent outpatient appointment within 14 days • Blood test or biopsy performed in hospital setting within 14 days No same-day emergency admission on the date of blood test result
	C	No escalation after 3 GP visits	Identify lack of escalation despite repeated GP attendances		**Three consecutive GP visits within 30 days but no record of:** • Blood test or urgent referral from primary care within 14 days • Urgent outpatient appointment within 14 days • Blood test or biopsy performed in hospital setting within 14 days No same-day emergency admission at the time of last recorded GP appointment
Secondary Care Delays	D	Delay following urgent GP referral	Identify delays after urgent referral by GP		**Urgent GP referral from primary care but no record of:** • Urgent outpatient appointment within 14 days • Blood test of biopsy performed in hospital setting within 14 days No same-day emergency admission on the date of blood test result
	E	Delay after urgent OP appt	Identify missed follow-up after urgent outpatient review		**Urgent outpatient appointment but no record of:** • Blood test or biopsy performed in hospital setting within 14 days
	F	No escalation after 3 blood tests	Identify failure to escalate after repeated testing		Three blood tests performed in hospital setting within 30 days but no record of biopsy performed in hospital setting within 14 days of last blood test
	G	Missed opportunity in emergency admission	Identify potential missed inpatient diagnosis opportunity		Emergency admission due to hematological or immune disorders or infection but no diagnosis within 30 days of discharge

Appendix 2:

This table shows avoidable hospital interactions for acute myeloid leukaemia (AML) patients and the associated costs.

Activity type	Number of avoidable interactions	Associated cost (£, 2023/24 prices)
Emergency admissions	200	£661,000
Planned admissions	640	£735,000
Outpatients appointments	300	£56,000
GP appointments	2,970	£251,000
Total	4,110	**£1,703,000**

> *If I came back from Dubai and they just did a blood test then, I would have diagnosed earlier. Everyday I waited, it took more of my body. That's why I had to go to a coma.*
>
> Mooni Jawadin
> **Diagnosed with AML in December 2022**

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