Key indicators for measuring financial needs

1. Background and purpose

Much progress has been made towards measuring the successes of financial inclusion. AFI’s 2011 Core Set of Financial Inclusion Indicators played a key role in facilitating better standardisation for measuring access and usage of financial services. This indicator note adds to the body of knowledge on financial inclusion measurement by taking a customer-centric approach and focusing specifically on how consumers’ meet their financial needs and what the outcome of this usage is.

The key Financial Needs Indicators can provide relevant data for policy makers and financial service providers to track the usage of financial services beyond traditional metrics, to gain a deeper understanding of how consumers are using formal financial products to meet their needs and to identify market gaps and opportunities. New insights can be generated on the progress towards impact in financial inclusion from a customer-centric perspective: how are formal financial services meeting consumers’ needs and what does that tell us about the effect formal inclusion is having on people’s financial lives?

This note provides a set of seven indicators on financial needs from a customer-centric perspective. It is part of a comprehensive online toolkit for guiding policy makers and practitioners through the measurement process.

Scope and indicator selection

The key indicators for measuring financial needs were developed by insight2impact in collaboration with the Financial Inclusion Data Working Group (FIDWG). The pilot study tested several emerging indicators from the Financial Needs Measurement Framework in Kenya, Mexico, Nigeria, Philippines and Zimbabwe.

A limited set of seven quantitative indicators were selected from the pilot study results, using the AFI FIDWG criteria of usefulness

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1. **Transfer of value** – to make a payment or transfer
2. **Liquidity** – to meet expenses within an income cycle
3. **Resilience** – to meet large expenses that have resulted from a financial shock
4. **Meeting goals** – to provide for larger life or work goals that cannot be funded from a single income cycle

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1 In countries where the level of financial inclusion is tracked over time, measuring the Financial Needs Indicators is especially relevant.

2 insight2impact is a non-profit think-tank. See [i2ifacility.org](http://i2ifacility.org) for more detail.
and relevance, pragmatism, consistency, flexibility, balance and aspiration. These indicators capture evidence of how people use financial services to meet their needs and to what extent these are formalised. The set also includes indicators to measure the outcomes of financial service usage, such as building resilience and meeting liquidity needs, which are relevant to the broader measurement of customers’ financial health.

**Financial Needs terminology explained**

Use case is the purpose for which people use a financial service. All use cases can be categorised into one of these four financial needs. For example, saving for retirement is a use case for meeting goals, paying a bill is a use case for transfer of value. Note that Liquidity is a standalone need and thus does not have any sub-use cases.

A **financial device** is defined as any physical, social or digital means to store or transfer value and that can be used to meet a financial need. It is what one makes use of to meet a financial use case. Financial devices can be classified in terms of who provides the service or the nature of the product:

- **Provision dimension**: Personal devices include cash at home, liquid assets or cutting back on expenditure, social devices include borrowing or assistance from friends and family. Formal devices are services provided by a registered financial institution, while informal devices are provided by third party service providers not licensed as financial institutions, such as savings groups or money lenders. People may use a combination of financial devices, depending on the use case.

- **Product dimension**: Financial product categories include savings, payments, credit and insurance, as well as unreciprocated assistance.

**Formal or informal?** One strength of the Financial Needs framework is the ability to quantify the relative use of various formal and informal devices used for various use cases. Formal devices refer to those provided by registered financial institutions and informal groups together informal devices and social and personal devices, including cash.

**Using the indicators**

Data to populate the indicators can be gathered as part of an existing financial inclusion survey or built into the design of a new survey instrument. These can be adapted to the national context and to answer a specific policy question. Certain indicators can be measured using financial transaction data. Countries are encouraged to use the FinNeeds online toolkit, which guides users through the process of measuring Financial Needs, including the selection of appropriate methods, survey modules and analysis. It is recommended that data collection captures key demographic information for disaggregation and further analysis as relevant for the context, such as gender, socio-economic status, urban/rural or geographic location.

**What insights can be generated?**

The analysis of these indicators enables decision-makers to understand what mechanisms people use (“financial devices”) to meet specific purposes (“use cases”). By aggregating the many use cases into a financial need, along with the financial devices used, we can understand the portfolio of financial devices used for each overall need. Building such a

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picture allows insights to be drawn on how different types of financial services are utilised as complements to, or substitutes for, one another in meeting each financial need. For financial service providers, this highlights untapped market opportunities and can be used to improve existing financial products or offer new, more relevant products for consumers. From a policymaker perspective, the financial needs lens helps to identify market gaps where the formal financial sector is not serving the needs of the population and so can inform policy or regulatory strategy.

Examples

- What proportion of people use a digital payment channel for bill payments (transfer of value)?
- What choices do people make to meet their needs when they run out of money within a month (liquidity)?
- What proportion of people make use of insurance when they are faced with a financial shock such as theft or an unexpected health condition (resilience)?
- What financial devices do people use to save for retirement (meeting goals)?

In deciding how to meet a use case, such as paying for medical costs when their child is sick, people take a full range of financial devices into consideration. This goes beyond formal credit, savings or insurance, to other options available to them, such as their social or family network, cash at home or liquid assets. They may use a combination of these devices, depending on the use case. Figure 1 illustrates how people may use different types of devices to respond to the single use case of a child being sick.

![Figure 1: Example devices used to meet specific use case](image-url)
2. The Financial Needs Indicators

The seven Financial Needs Indicators cover three dimensions: the use cases, device portfolio and outcomes of usage.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Proportion of adults who [experienced a specific use case]</td>
</tr>
<tr>
<td>2</td>
<td>Proportion of adults using [a specific financial device category] to meet [specific need]</td>
</tr>
<tr>
<td>3</td>
<td>Proportion of adults using at least one formal financial device to meet their needs</td>
</tr>
<tr>
<td>4</td>
<td>Proportion of adults who use digital financial devices to transfer value on a weekly, monthly or infrequent basis (transfer of value)</td>
</tr>
<tr>
<td>5</td>
<td>Proportion of adults who experienced liquidity distress in the last year (liquidity)</td>
</tr>
<tr>
<td>6</td>
<td>Proportion of adults who experienced a shock in the last year and have not yet recovered (resilience)</td>
</tr>
<tr>
<td>7</td>
<td>Proportion of adults who are using a formal financial service towards meeting a goal (meeting goals)</td>
</tr>
</tbody>
</table>

2.1 Use cases dimension

The use case dimension shows what people spend their money on and what they use financial devices for. Each use case can be aggregated into a financial need to draw out meaningful insights. Use cases are the basis for calculating all the Financial Needs Indicators. Therefore, the first indicator identifies the most relevant use cases for each need.
Understanding a given population’s most common use cases for each of the financial needs provides insights into key drivers of financial services uptake. Establishing use case incidence forms the basis for deeper analysis of usage from a customer perspective, such as whether use cases across the different need categories are met or unmet by formal financial service providers or people’s preferred usage channels for a particular payment use case (i.e. cash, instant payments, card payment, etc.).

### How to calculate

Number of adults who [experienced a specific use case] in the last 12 months

\[
\frac{\text{Number of adults who [experienced a specific use case]}}{\text{Total number of adults}} \times 100
\]

Calculate the use cases by need: transfer of value, resilience and meeting goals. Highlight the three most commonly reported used cases for each need. Note that liquidity is a single use case (experiencing liquidity distress). For adult population denominator use the national age definition as range, or as collected in the specific data source.

The suggested use cases in the questions below will need to be contextualised by country.

The timeframe for the survey question differs by need, but the overall indicator remains the same. Some examples are:

- **Transfer of value**: In the last month, did you pay for public transport?
- **Liquidity**: Have you been able to balance your income and expenditure over the last month? (Did you run out of money?)
- **Resilience**: In the last year did you experience a financial shock? What was the shock? Examples of shocks include loss of income, death of a family member, a serious illness or accident, natural disaster and theft/loss of an asset.
- **Meeting goals**: In the last year have you put money aside for a long-term goal? Have you borrowed money or taken a loan to meet a long-term goal? Have you had assistance from friends of family to meet a long-term goal? If yes, what was the goal? Examples of long-term goals include to buy land/house, to pay for children’s education, to save for retirement, to invest in my business and to pay for a wedding.

Tracking changes in annual resilience use case incidence over 3-5 years will provide useful trends on shocks.

### Frequency

Annual survey

### Data source

Demand-side survey

Transactional data can be used for measuring formal transfer of value use cases.

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4 Expressing a liquidity need means that a person or household could not meet their running expenses from their running income and had to draw on other devices to meet their expense or fail to meet their expenses. If other devices were used to meet regular expenses (not income) this is defined as a liquidity need (distress).

5 Although income cycles differ by types of work and country contexts, there are many payments that are made monthly, thus being able to balance income and expenditures over a month is an important metric.

6 For example, are there cyclical natural disasters or climate change related shocks?
Meeting Goals
Percentage of adults who express each use case

[Bar chart showing percentages for various use cases]

Example

Source: [Provide source if available]
2.2 Device portfolio dimension

By aggregating use cases, and the devices people use to meet those use cases, into the four financial needs, broader analysis can be done to identify the ways in which people meet their financial needs. This shows whether people use formal or informal devices for a specific need and what kinds of financial products – savings, loans etc. – they choose.

<table>
<thead>
<tr>
<th>Indicator 2</th>
<th>Proportion of adults using [a specific financial device] to meet [specific need]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance</td>
<td>Understanding which financial device(s) people turn to for which need provides key insights into customer preferences and behaviours in their financial lives. It also highlights key gaps in formal financial service offerings that leave population segments vulnerable to risk or undermine their financial progress. As such, tracking this indicator over time has strong policy relevance. In some countries, tracking remittances is especially important and whether this is made via formal or informal channels. Note that this indicator can also be calculated at an individual use case level, for example just for health expenditure, if this information is required for policy making.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>How to calculate</th>
<th>Suggested disaggregation of results for analysis:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• For transfer of value:</td>
</tr>
<tr>
<td></td>
<td>• Digital/electronic vs cash</td>
</tr>
<tr>
<td></td>
<td>• Remittance: formal vs informal (including cash)</td>
</tr>
<tr>
<td></td>
<td>• For resilience:</td>
</tr>
<tr>
<td></td>
<td>• Product categorisation: credit, insurance, savings or assistance from friends or family</td>
</tr>
<tr>
<td></td>
<td>• Provision categorisation: formal, informal institutions, personal, social</td>
</tr>
<tr>
<td></td>
<td>• For liquidity or meeting goals:</td>
</tr>
<tr>
<td></td>
<td>• Product categorisation: credit, savings or assistance from friends or family</td>
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7 For example, are there cases where people mostly turn to friends and family? Over time, what are the trends in uptake of insurance products?
8 For example, where “personal” devices such as cutting back on consumption or selling assets are the dominant choice to meet a resilience need, this may indicate high levels of vulnerability. It may also indicate where public policy is needed to develop better suited formal savings options or to promote insurance.
9 For liquidity, this relates to device choices during times of liquidity distress.
10 Including pensions in the case of meeting goals
### Indicator 3

**Proportion of adults using at least one formal financial service to meet their needs**

**Relevance**

This indicator provides an important insight into people’s financial lives and the effectiveness of the formal financial sector to meet the financial needs of the population. As it is calculated across the four financial needs for usage of formal and informal devices, it highlights unmet needs and opportunities for improving formal offerings. This information can be used by financial institutions to design more competitive offerings that better meet consumers’ needs.

**How to calculate**

Number of adults using at least one formal financial service to meet any use case classified under [need category]

\[
\text{Number} \quad \text{as } \% \text{ of } \text{Total number of adults with [same need category]}
\]

Categorise devices used to meet a financial need into formal or informal. Calculate for each need or by use case where this is important for policy guidance. Use the broad definition of informal (i.e. combine informal financial services, social and personal devices).

For transfer of value, the distinction will be between digital/electronic and cash.

**Frequency**

Annual survey

**Data source**

Demand-side survey

**Example**

- **Formal financial sector not meeting needs**
- **Transfer of value:** 29%
- **Liquidity:** 8%
- **Resilience:** 10%
- **Meeting goals:** 15%

- % of adults who use at least one formal service to meet their needs
- % of adults who use only informal/in devices to meet their needs

Source: [PublicInfluence]
2.3 Outcome dimension

The outcome of financial usage refers to the success, or failure, of financial devices to meet the financial needs of a population. They are a barometer for measuring whether the financial sector is fit for purpose. There is one outcome indicator recommended for each of the financial needs.

In order to measure outcomes for the whole population, demand side survey data should be used, as transaction data may not reach low income or excluded population groups. However, for one outcome indicator (transfer of value) transactional data is recommended to generate more robust results for this segment of the (financially included) population.

Important to measuring outcomes here is the linkage to financial device portfolio choices and whether these are formal or informal (as measured in indicator 2 and 3). What insights can we infer from the correlation between device choices and outcomes of usage? For example, are those consumers using formal financial devices better able to recover from a financial shock? If there is no clear correlation, then what does that tell us about the “success” of financial inclusion policy measures or market strategies in promoting positive consumer outcomes? Alternatively, if people remain vulnerable despite reliance on informal, personal or social devices, what financial inclusion imperative does that imply for policymakers? This evidence helps us understand whether financial services are meeting people’s needs.

Transfer of value outcome

<table>
<thead>
<tr>
<th>Indicator 4</th>
<th>Proportion of adults who use digital financial services to transfer value on a weekly, monthly infrequent basis</th>
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<tbody>
<tr>
<td></td>
<td>Measuring how frequently a population transacts using digital financial services tracks the growth in digitisation of the economy and is a proxy for measuring the outcome. If digital transactions are used frequently, this tells us that the financial service meets the customer’s purpose. While digital financial usage is not the only dimension of usage, digitisation is a front-of-mind policy consideration and hence the indicator is phrased in terms of digital usage. The emphasis is on fully digital transactions, namely non-cash transactions where both the store of value and the (outbound) channel is digital. Thus, this fully digital definition excludes over the counter transactions with an agent or cash-in/cash-out transactions.11</td>
</tr>
<tr>
<td>Relevance</td>
<td>Commonly, digital financial service usage is measured in 90-day intervals to denote active versus inactive accounts. Disaggregating usage into more frequent bands of weekly, monthly, infrequent and dormant users provides a more nuanced understanding of active usage as an outcome, and thus progress towards digitisation for different use cases. It is noted that some digital transactions that are made infrequently will be excluded, such as annual insurance premiums or annual rental payments. However, it is assumed that digital payments behaviour for frequent users would extend beyond one use case.</td>
</tr>
</tbody>
</table>

11 This definition of digital financial services is taken from the Digital Frontiers Institute. It is narrower than other definitions which would see any transaction with a digital link as digital. We argue that excluding transactions where money is merely cashed in or cashed out provides a truer indication of the policy imperative for digitisation.
**How to calculate**

**Weekly users:** Number of adults with an account who made one or more fully digital transactions in the last week

\[ \text{Number of adults} \times \text{as % of} \times \text{Total number of adults with an account} \]

**Monthly users:** Number of adults with an account who made between one and three fully digital transactions in the last month

\[ \text{Number of adults} \times \text{as % of} \times \text{Total number of adults with an account} \]

**Infrequent users:** Number of adults with an account who made one or two fully digital transactions in the last three months

\[ \text{Number of adults} \times \text{as % of} \times \text{Total number of adults with an account} \]

**Dormant users:** Number of adults with an account who made no fully digital transactions in the last three months

\[ \text{Number of adults} \times \text{as % of} \times \text{Total number of adults with an account} \]

**Note:** “account” here refers to any digital store of value against which the holder can transact. The frequency bands may not align with usage patterns for credit, pensions or savings. Where a specific policy or market question exists, this indicator can be tailored and further analysed by type of financial service or use case.

**Frequency**

Annually. For each cycle, track usage over a three-month period.

**Data source**

Transaction data (three consecutive months of data required)

It could be calculated using a demand-side survey, but will not provide the same level of robustness, due to recall bias.

**Example**

**Frequency of usage**

![Frequency of usage chart]

### Sample chart

- **Daily:** 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%
- **Weekly:** 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%
- **Monthly:** 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%
- **Infrequent:** 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%
- **Dormant:** 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%

**Source:** National statistics data

12 It is difficult to remember how one paid for a service or goods beyond a short period of time. Thus, asking this question will not produce reliable data.
Liquidity outcome

<table>
<thead>
<tr>
<th>Indicator 5</th>
<th>Proportion of adults who experienced liquidity distress in the last year</th>
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<tbody>
<tr>
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<td>This indicator is based on the frequency of liquidity distress, which refers to a person or household being unable to meet their regular expenses from their regular income and thus having to draw on other devices to meet their expenses or fail to meet their expenses. Where people use other devices to make ends meet, this can highlight the success or failure of the financial sector to assist with liquidity distress.</td>
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<td>Measuring the incidence of liquidity distress provides policy insights on the vulnerability of the population, as the financial choices people make to balance income and expenses can have long-lasting consequences for the attainment of other financial needs.</td>
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<td>Insights on the link between financial service usage and liquidity outcomes can be gained by mapping liquidity distress incidence against the results of indicators 2 and 3 on the device portfolio.</td>
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<table>
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<th>How to calculate</th>
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<tbody>
<tr>
<td>Severe distress</td>
<td>Number of adults who experienced more than one month of liquidity distress in the last year</td>
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<tr>
<td></td>
<td>_____ as % of _____</td>
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<tr>
<td></td>
<td>Total number of adults</td>
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<tr>
<td>Some distress</td>
<td>Number of adults who experienced one month of liquidity distress in the last year</td>
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<tr>
<td></td>
<td>_____ as % of _____</td>
</tr>
<tr>
<td></td>
<td>Total number of adults</td>
</tr>
<tr>
<td>No distress</td>
<td>Number of adults who experienced no months of liquidity distress in the last year</td>
</tr>
<tr>
<td></td>
<td>_____ as % of _____</td>
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<tr>
<td></td>
<td>Total number of adults</td>
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</table>

In reporting this indicator, aggregate those experiencing some and severe distress. However, for deeper insights, disaggregate the findings into those with no liquidity distress, those with some liquidity distress and those with severe distress.

Map results against responses to device portfolio choices for liquidity (indicator 2) for those with no distress, and data on how liquidity shortfalls were met for those with some or severe distress, to infer insights on link between financial device portfolio and liquidity outcomes.

An alternative measure is the proportion of adults who experienced liquidity distress in the last three months. This provides a more recent measure, but in contexts where income is seasonal, this may introduce a bias. Thus, we chose to phrase the indicator “in the last year.”

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Annually survey</th>
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<tbody>
<tr>
<td>Data source</td>
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For example: are people who use formal credit or formal savings devices less likely to experience liquidity distress than those who do not? If not, what is the message for financial inclusion policymakers and financial service providers regarding the value provided by the financial sector in creating liquidity?
Resilience outcome

Indicator 6

Proportion of adults who experienced a shock in the last year and have not yet recovered

This indicator measures resilience and vulnerability, which are central to financial health. Tracking this helps policy makers understand the proportion of adults who are financially resilient, and whether financial inclusion policies and approaches have been successful in building resilience.

To understand how financial usage relates to resilience outcomes, results for this indicator should be mapped against device portfolio choices in indicators 2 and 3.

Relevance

Number of adults who experienced a financial shock more than three months ago but have not yet recovered

\[
\text{____ as } \% \text{ of } \text{____}
\]

Total number of adults who experienced a financial shock within the last 12 months, but more than three months ago

How to calculate

It is useful for analysis to disaggregate between those who recovered within three months, those who recovered but took more than three months to do so and those who have still not recovered.

As with indicator 5, map results against device portfolio for resilience in indicator 2 and formal/informal devices used to meet resilience needs in indicator 3.

Definitions

**Shock**: this is an unforeseen or unexpected risk event that causes financial loss. This could include a loss of income, significant medical costs due to a sickness or accident, the death of a family member, or a natural disaster in which assets or livelihood were lost. The shock should have been experienced within the last 12 months, but more than 3 months ago\(^{14}\).

**Recovered**: to be recovered means that the person regains a similar financial position to what they had prior to the shock, i.e. that they can once again sufficiently cover their financial needs and obligations as they did prior to the shock. It is a subjective, self-assessed measure.\(^{15}\)

Frequency

Annually survey

Data source

Demand-side survey

Example

The twelve-month period is imposed to mitigate against recall bias in surveys. The three-month threshold is included to allow a feasible period for recovery.

Underlying survey questions ask respondents (i) whether they experienced a shock in the past 12 months and, if so, (ii) when it was experienced and (iii) whether they have recovered. This then allows the calculation of the indicator as set out here.
# Meeting goals outcome

<table>
<thead>
<tr>
<th>Indicator 7</th>
<th>Proportion of adults using a formal financial device towards achieving a long-term goal</th>
</tr>
</thead>
</table>

**Relevance**

Most long-term goals are not achieved within a year, thus measuring the achievement of a long-term goal within a year is not possible. Instead, this indicator focuses on the uptake of formal savings products towards achieving long-term goals. The use of these services for long-term goals is a proxy measure of the ability of the formal financial system to enable customers to meet their need for “meeting goals”. Where customers prefer using informal financial devices this raises policy questions around the existing financial system. For financial service providers it can highlight the opportunity to design products specifically earmarked for the most common use cases, such as land/housing, saving for school fees or pensions.

**How to calculate**

Number of adults who have used a formal savings device towards achieving a long-term goal in the last 12 months

\[
\text{Number of adults} \quad \frac{\text{as } \% \text{ of}}{\text{Total number of adults with a meeting goals need}}
\]

This indicator aggregates the use of formal savings devices including formal accounts, mobile money and mobile-wallets or other digital savings products. Below is an example with device choices disaggregated for deeper analysis.

**Definitions**

- **Formal savings devices**: savings products available from registered financial institutions, mobile money or mobile-wallet or similar.
- **Long-term goal**: both personal and/or business use cases for meeting goals, as identified in indicator #1

**Frequency**

Annual survey

**Data source**

Demand-side survey

For detailed guidance on applying the Financial Needs indicators, please see the FinNeeds online toolkit.
How to find us
Get involved. Contact us.

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