

A Checklist to Guide Stem Cell Donor Recruitment



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Background

- Checklists are important tools in error management, and their use improves best-practice adherence¹
- They provide guidance, and act as verification after completion of a task
- Grouping related information can improve recall²
- Checklists can also be used to assess provider competency³
- However, no published checklists exist which guide stem cell donor recruitment

- The Stem Cell Club is a federal non-profit founded in 2011 in Canada, aiming to improve the quantity and quality of membership on Canada's stem cell donor database
- In total, we have recruited 5025 potential donors at our ten chapters at university campuses across Canada
- We have trained over 500 medical, nursing, and undergraduate students as volunteers and leaders for our stem cell drives
- Here, we describe our checklist to facilitate stem cell donor recruitment

Stem Cell Drive Checklist Objectives

- Standardize stem cell drives run by different individuals/groups
- Improve best-practice adherence
- Serve as a memory recall tool for volunteers: instruct them on what to do at each station
- Enhance training program for new volunteers
- Facilitate error reduction
- Allow for assessment of volunteer/drive coordinator competency

Methods for Checklist Construction

- Our model of stem cell drive design was used as a starting point to create station-specific checklists, designed for ease of use at stem cell drives
- World Marrow Donor Association (WMDA) suggested procedures for securing informed consent at time of registration⁴ and recommended training topics for volunteer recruiters⁵ were incorporated into the checklists
- The prescreening checklist includes an evidence based approach to recruitment of the most needed stem cell donors⁶⁻¹¹
- Our approach to identify and correct errors was developed from our experience leading stem cell drives and observing common mistakes and difficulties that volunteers and registrants encountered

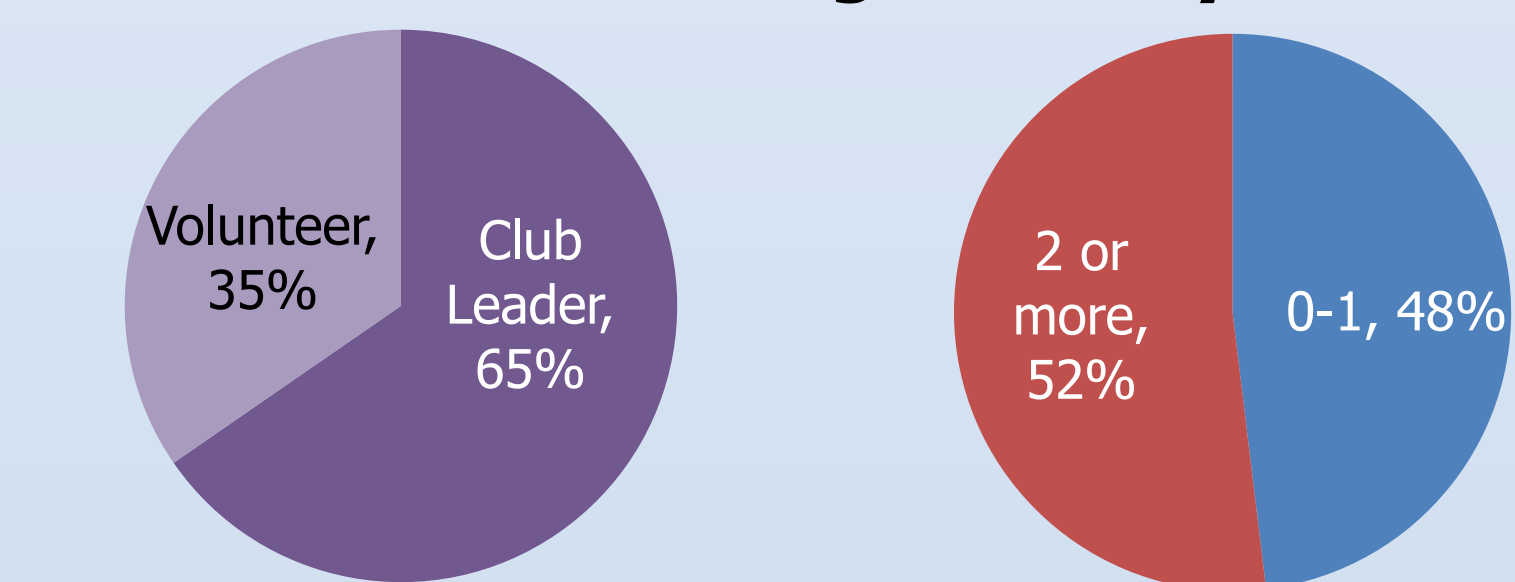
Methods: Checklist Evaluation

- In February 2016, we surveyed Stem Cell Club members from across Canada to assess how our checklists were used
- Stem Cell Club chapter presidents emailed leaders and volunteers at their respective campuses to complete the survey
- Survey questions employed a five-point Likert scale

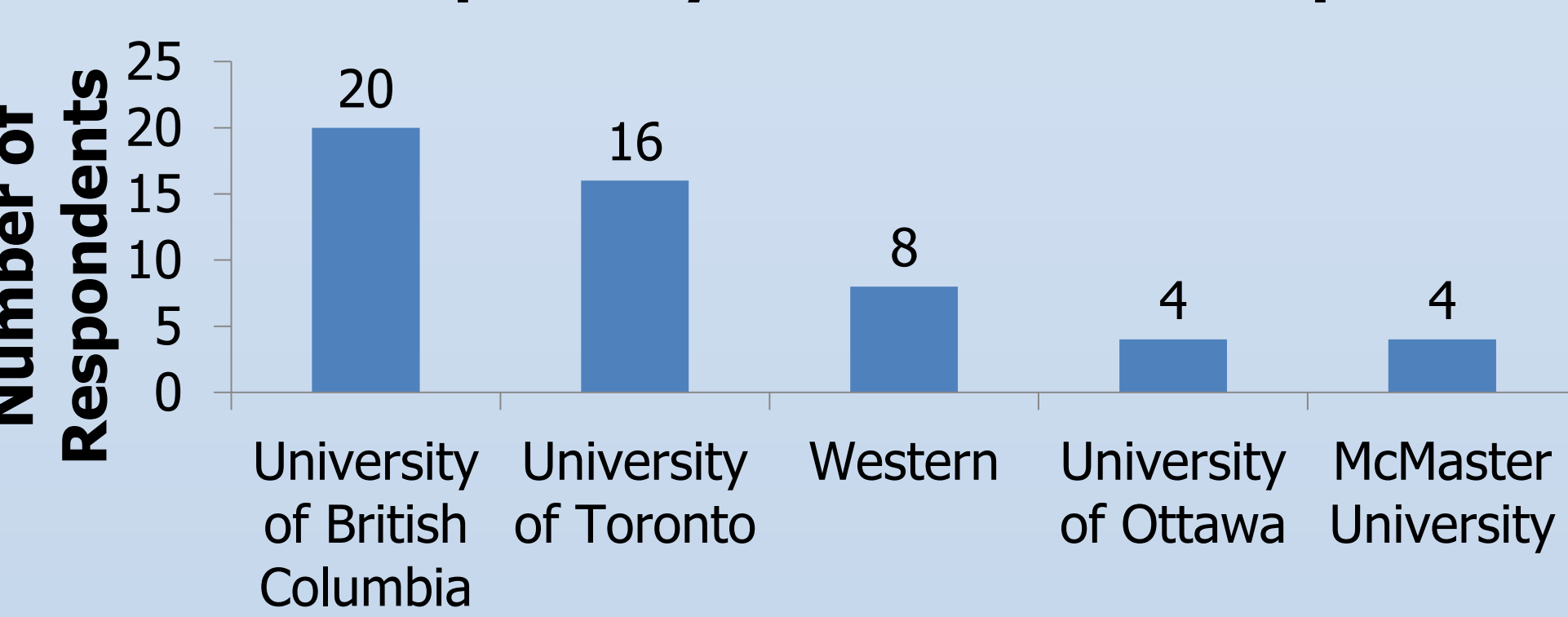
Results: Respondent Characteristics

Stem Cell Club Role

"I have participated in this many stem cell drives organized by Stem Cell Club"



Participants by Stem Cell Club Chapter



Checklists

1. Stem Cell Drive Setup

- Before the drive**
 - Complete pre-event form and send to registry
 - Location scouting
 - Power outlets if needed
 - Fire safety and first aid plan
 - Rain plan
 - Arranging access to tables and chairs needed
 - Supplies plan
 - Swab kits, registration forms, information pamphlets, informed consent diagrams, stationary and needed office supplies
 - Volunteer, reconciliation, and shipping paperwork
 - Volunteer Recruiter recruitment, sign-up, and training
 - Promotions
 - Social media, posters, etc.
- At the drive**
 - Setup the drive in the following station order: prescreening, informed consent, registration, swabbing, and reconciliation
 - Volunteers
 - Sign-in
 - Training refresher as needed
 - Delegation of tasks

2. Prescreening

- "Do you have a minute to save a life?"
- Explain the principles of stem cell donation:
 - What are Stem Cells?
 - What is the purpose of the stem cell drive?
 - What is the tissue sample/swab is for? (DNA Sample/typing, used to match to patients in need)
 - Who are the patients we help? (patients with blood cancers, immune/metabolic diseases)
 - Explain briefly how stem cells are donated from adults (peripheral blood and bone marrow donation – refer to diagrams)
- "You could be the match to save the life of a patient located anywhere in the world"
- Eligibility Requirements**
 - Age 17 to 35
 - Good general health
 - Will help all patients
 - Health Care Coverage
- Most Needed/Ideal Donors**
 - Young
 - Male
 - Ethnically Diverse
 - Informed and Committed

3. Redirect Donors to Help in Other Ways

- Over 35?**
 - "As people age, their stem cells age too"
 - "Studies have shown that patients have a better chance of surviving when the donor is younger"
- Female?**
 - "Studies have shown that when the donor is male, the patient has less chance of complications"
 - "Female donors experience more side effects than males"
 - Encourage women to donate umbilical cord stem cells from baby if they plan to have a child (where available)
- Poor health?**
 - "Donors need to be healthy, not just to protect the patient but also to protect themselves"
 - Refer the registrant to the website wiki.wmda.info for disease-specific information regarding medical suitability
- Unwilling to donate to anyone in need?**
 - Explain that donation is anonymous for both patient and donor
 - Registrants must be willing to donate to anyone in need, anywhere in the world
- Lacking healthcare coverage?**
 - "Health insurance is required at time of donation to cover the cost of stem cell collection"
 - Registrants from another country can search for a registry in their home country on bmdw.org
- Key messages which apply to everyone**
 - "Sign up for blood donation"
 - "Encourage family and friends who are males ages 17-35 to register"
 - Invite the registrant to volunteer at and help promote stem cell drives

5. Registration

- Check for errors:**
 - Date (correct date and correct format)
 - Check that registrant's birthdate is not confused for today's date
 - Legible?
 - Missed any questions?
 - Consent signed (correct date and format)
- Explain confidentiality of personal data** (for both registrant and patient)
- Refer to consent form for details** of data collection, storage, usage
 - "Anonymized health information is shared with other registries to help find matches for patients across the world"
- Error Correction:**

Correct mistake, and initial and date the correction

2010-01-04
2009-12-01-2010-01-04

7. Reconciliation

- Assess if there are any systematic errors occurring from preceding stations and troubleshoot or notify drive supervisor as applicable
- Ask the registrant: "Do you have **unanswered questions?**"
- Error check** the registration form, including
 - Legible? Dates? Missed questions?
 - Barcode labels properly affixed
- Provide information** to registrant:
 - Length of time you will remain on the registry
 - "The registry may contact you by telephone if they have any questions about your registration"
 - "Update the registry with any changes to health or address"
- Ask the registrant to consider signing up to donate blood
- Final Paperwork** - For each swab kit:
 - Affix unique barcode label from each swab kit onto tracking log
 - Log registrant demographics on outcomes form
 - If drive is not at a registry office or clinic: record registrant name and phone number on registrant data sheet

4. Informed Consent

- Hand registrants an information pamphlet**
- Educate about Procedures:**
 - Peripheral Blood Transplant
 - Donor will receive a medicine/growth factor to increase stem cells in blood
 - Filtering stem cells for 6 hours, then sent home
 - Bone Marrow Transplant
 - Put to sleep
 - Day procedure
 - Needle into side of hip
- Explain anonymity of both patient and volunteer donor**
- Explain donor right to withdraw at any time**
- Explain risks/possible side effects of stem cell donation → refer to Table**
 - Temporary pain associated with both procedures:
 - Peripheral blood: aches/pains from growth factor
 - Bone Marrow: pain following the procedure
 - Other temporary side effects similar to blood donation:
 - Fatigue
 - Headache
 - Nausea
 - Median recovery time
 - Peripheral Blood: ~ 1 week
 - Bone Marrow: ~ 4 weeks
 - No long term health effects of growth factor seen after 10 years

6. Swabbing

- Check with the registrant to see if they understand.
- Ask them:**
 - "What happens if you are a match?"
 - "What are the risks involved in donating stem cells?"
 - "What happens if you say no?"
- Affix unique barcode labels onto:**
 - Swabs
 - Swab Kit Envelope
 - Consent Form
- Guide registrants through swabbing**
 - Brush inside of cheek for 30 seconds → no sucking/twirling
- Seal completed swab kit**
- Send registrant to reconciliation staff member**

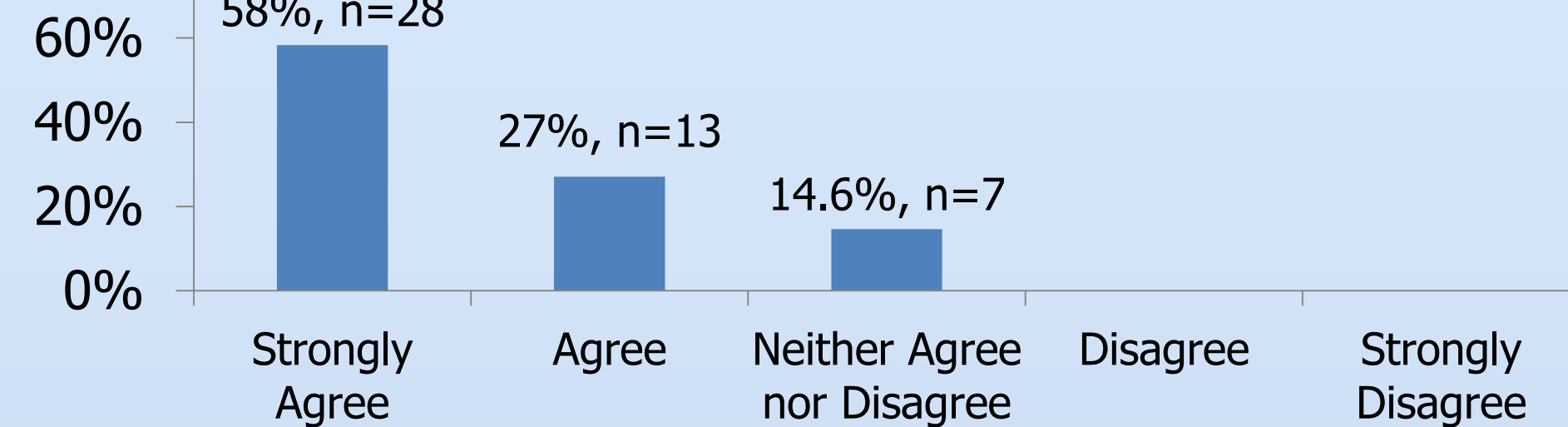
8. Takedown of Drive and Post-event

- Bundle kits with elastics and place into clear plastic bag
- Complete reconciliation log
- Complete shipping waybill if needed
- Assemble the box of completed swab kits as follows:**
 - In the box**, there should be a plastic bag with:
 - 1. Bundled swab kits
 - 2. Tracking log (s)
 - 3. Reconciliation log
 - On the box:**
 - Shipping waybill if applicable
 - Confidentiality Stickers
 - For Internal Use** (keep for later)
 - Shipping Waybill Number if applicable
 - Outcomes Form
 - Send picture of registrant data sheets(s) to registry office, then destroy
- Count and record remaining supplies
 - Arrange to replenish supplies as needed
- Return supplies to storage
- Complete post event report
- If swab kits are lost en-route to registry office, registry to use registrant data sheet to notify recruited registrants that their data has been compromised

Results - Checklist Evaluation

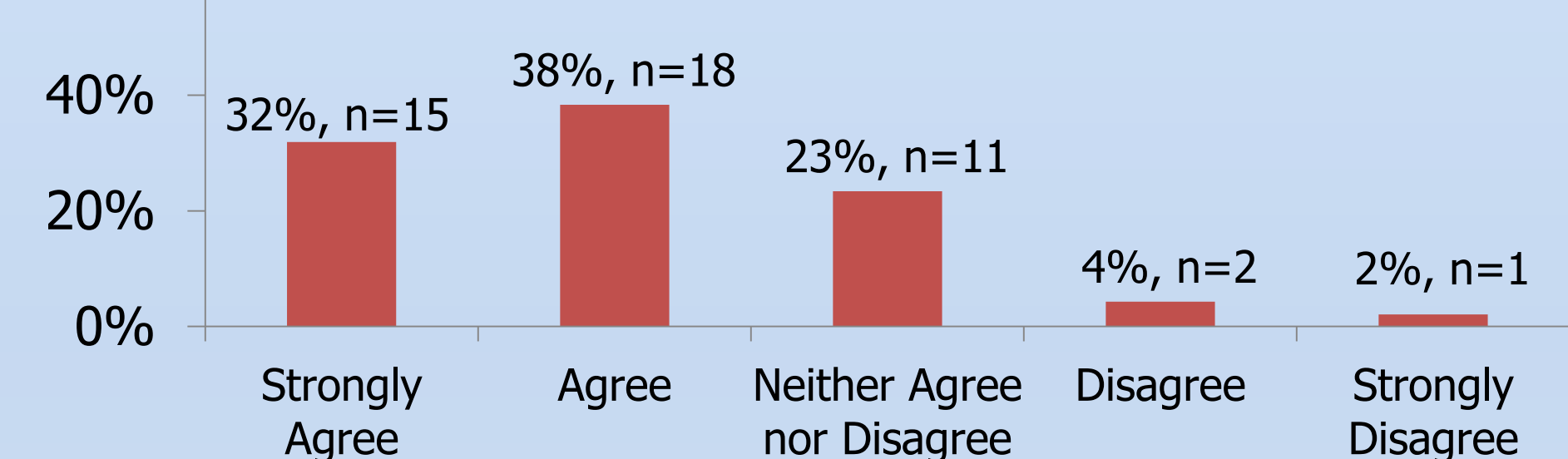
Objective: Standardize Stem Cell Drives

"At our drives, checklists are available to use"



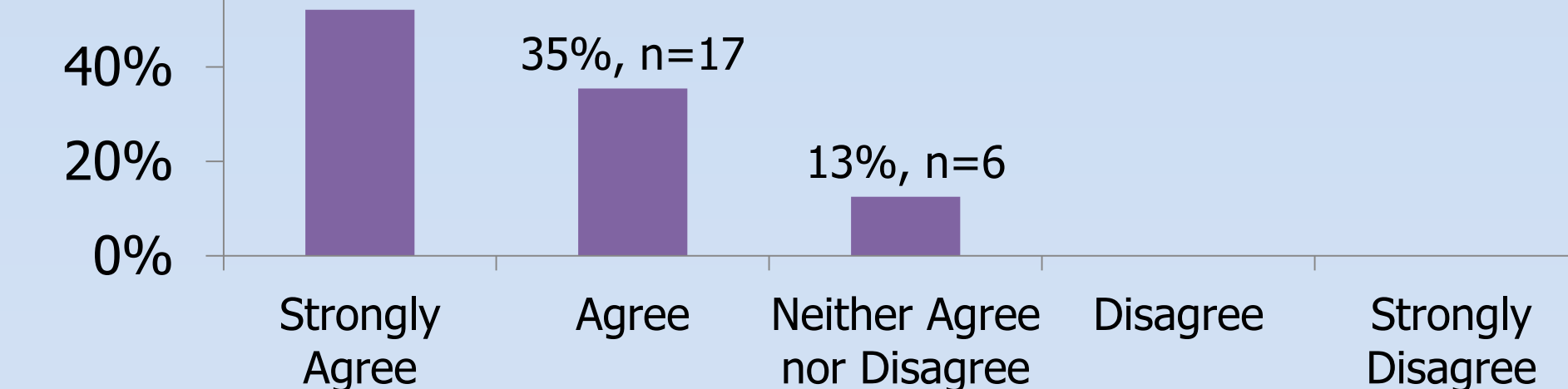
Objective: Serve as a memory recall tool

"At our drives, I personally refer to/use the checklists"



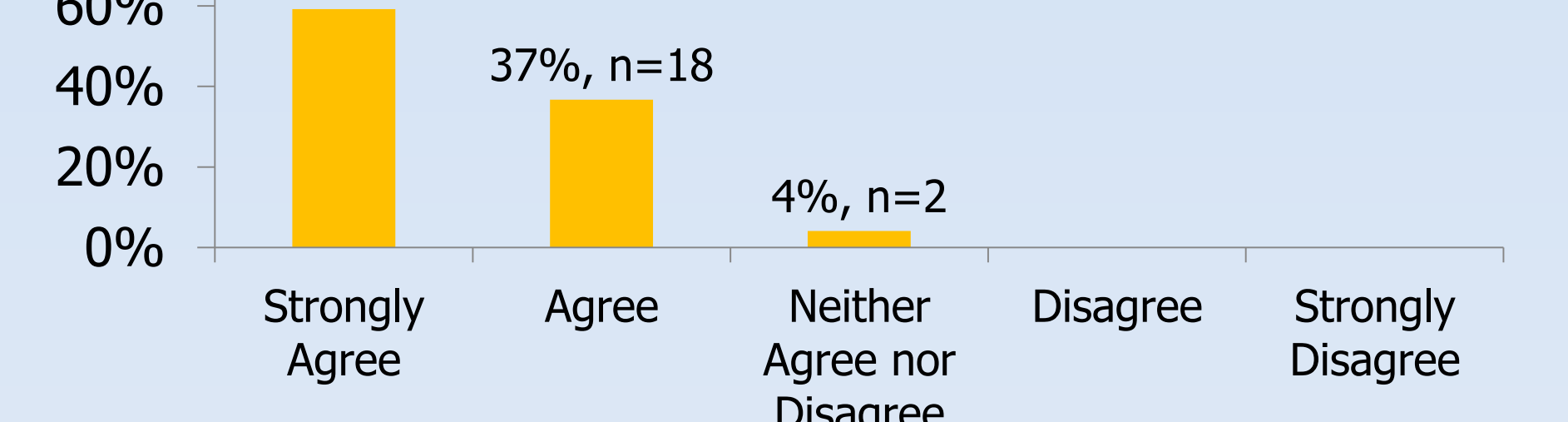
Objective: Improve best-practice adherence

"The checklist made it easier to know and complete required tasks"

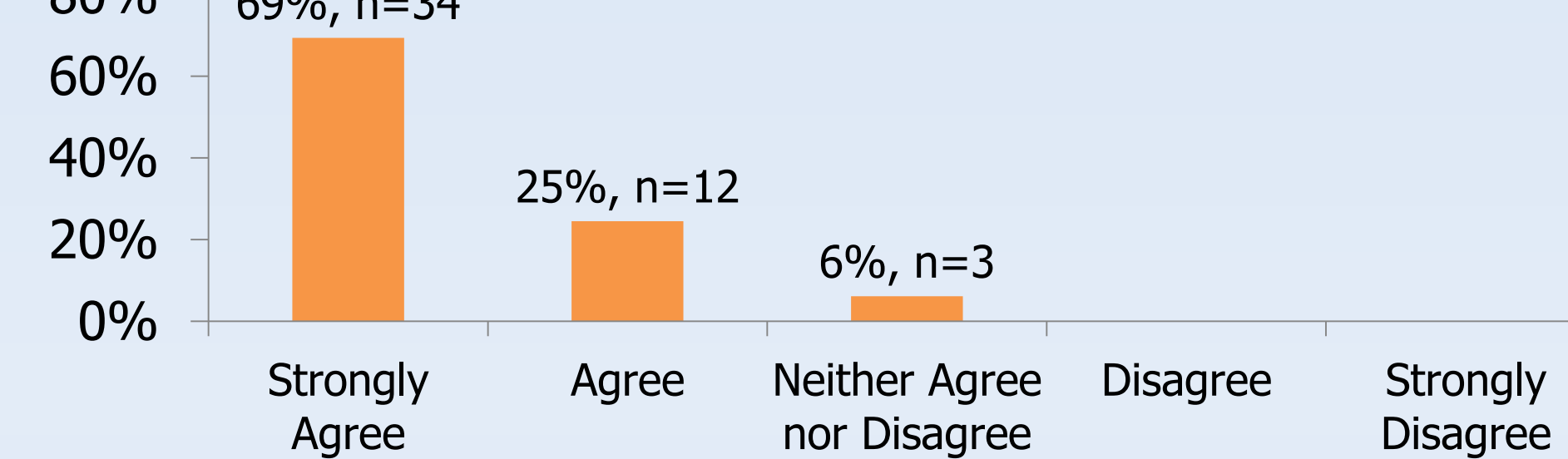


Team's Overall Assessment of Checklist Utility

"The checklists are an important resource to have at stem cell drives"



"All stem cell drives should use these checklists"



Conclusions

- These checklists are relevant to anyone involved in stem cell donor recruitment
- Their use guides recruiter training and performance and ensures consistent registrant experience across recruitment events

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Checklists and Recruiter Training

- Checklists have been incorporated into Stem Cell Club's online training program, published at www.stemcellclub.ca/training
- Before their first drives, new recruiters practice going through the checklist in pairs
- In the module Organizing a Stem Cell Drive, learners practice using checklists to assess volunteer competency