Automated Follow-ups - Quick Start Guide

🚀 What's Implemented

The automated follow-up system is **fully implemented** and ready to deploy!

✅ Features

- Automated follow-up scheduling based on inquiry rules
- Email delivery via SMTP
- SMS delivery via Twilio (optional)
- Multi-channel communication (Email, SMS, Phone Call, Task)
- Rule-based follow-up timing
- API endpoint for processing follow-ups

📁 Key Files Created/Modified

1. `.github/workflows/process-followups.yml` - GitHub Actions cron job
2. `render.yaml` - Updated with cron job documentation
3. `AUTOMATED_FOLLOWUPS_SETUP.txt` - Comprehensive setup guide

🎯 Existing Implementation (Already Built)

- `src/app/api/follow-ups/process/route.ts` - Processing endpoint
- `src/lib/followup/followup-processor.ts` - Follow-up processing logic
- `src/lib/followup/followup-scheduler.ts` - Scheduling logic
- `src/lib/followup/followup-rules.ts` - Follow-up rules engine
- `src/lib/email/inquiry-email-service.ts` - Email delivery
- `src/lib/sms/sms-service.ts` - SMS delivery

⚡ Quick Setup (5 Minutes)

Step 1: Generate CRON_SECRET

```
openssl rand -hex 32
```

Copy the output (e.g., `a1b2c3d4e5f6...`)

Step 2: Add to Render Environment Variables

1. Go to https://dashboard.render.com
2. Select your service (carelinkai)
3. Click "Environment" tab
4. Add variable:
   - Key: `CRON_SECRET`
   - Value: (paste the generated secret)
5. Click "Save Changes"

Step 3: Add to GitHub Secrets

1. Go to https://github.com/profyt7/carelinkai/settings/secrets/actions
2. Click "New repository secret"
3. Name: `CRON_SECRET`
4. Value: (same as Render)
5. Click "Add secret"

Step 4: Configure Email (Required)

Add these to Render Environment Variables:
- `SMTP_HOST` - Your SMTP server (e.g., smtp.gmail.com)
- `SMTP_PORT` - SMTP port (587 or 465)
- `SMTP_USER` - Your email address
- `SMTP_PASS` - Your email password or app password
- `SMTP_FROM` - Sender email address

Step 5: Deploy

```
git add .
git commit -m "feat: Add automated follow-ups system with GitHub Actions cron"
git push origin main
```

🔁 How It Works

1. **GitHub Actions** runs every 6 hours (12 AM, 6 AM, 12 PM, 6 PM UTC)
2. Calls `POST /api/follow-ups/process` with authentication
3. System processes all due follow-ups:
   - Checks database for pending follow-ups
   - Generates personalized content using AI
   - Sends emails via SMTP
   - Sends SMS via Twilio (if configured)
   - Updates follow-up status in database
4. Creates inquiry response records

📊 Follow-up Schedule

Default rules:
- **Urgent inquiries**: SMS after 1 hour
- **New inquiries**: Email after 24 hours
- **Second follow-up**: Email after 3 days
- **Third follow-up**: Email after 7 days
- **Tour reminders**: SMS 24 hours before
- **Post-tour**: Email 48 hours after

🧪 Testing

Manual Trigger (Recommended for Testing)

1. Go to https://github.com/profyt7/carelinkai/actions
2. Click "Process Follow-ups"

3. Click "Run workflow"

4. Select "main" branch

5. Click "Run workflow"

6. View logs to see results

API Test (Alternative)

```
curl -X POST \
  -H "Authorization: Bearer YOUR_CRON_SECRET" \
  https://carelinkai.onrender.com/api/follow-ups/process
```

Expected response:

```
{
  "success": true,
  "message": "Follow-ups processed successfully"
}
```

📱 Optional: SMS Setup

If you want SMS follow-ups, add Twilio credentials to Render:

- `TWILIO_ACCOUNT_SID` - Your Twilio account SID
- `TWILIO_AUTH_TOKEN` - Your Twilio auth token
- `TWILIO_PHONE_NUMBER` - Your Twilio phone number (+1XXXXXXXXXX)

Note: SMS is optional. The system will work with email-only if Twilio is not configured.

🎛️ Customization

Change Frequency

Edit `.github/workflows/process-followups.yml`:

```
schedule:
  - cron: '0 */6 * * *'  # Every 6 hours (current)
  # - cron: '0 */4 * * *'  # Every 4 hours
  # - cron: '0 */12 * * *'  # Every 12 hours
  # - cron: '0 9 * * *'  # Daily at 9 AM
```

Modify Rules

Edit `src/lib/followup/followup-rules.ts` to add/modify follow-up rules.

Customize Emails

Edit `src/lib/email/inquiry-email-service.ts` to change email templates.

🔍 Monitoring

View Execution History

https://github.com/profyt7/carelinkai/actions/workflows/process-followups.yml

Check Render Logs

```
Dashboard > carelinkai > Logs
```

Filter by "follow-up" to see processing logs.

Database Query

```sql
SELECT * FROM "FollowUp"
WHERE status = 'PENDING'
ORDER BY "scheduledFor" DESC;
```

⚠️ Important Notes

1. **CRON_SECRET Security**: Never commit this to git. Always use environment variables.
2. **Email Configuration**: Required for email follow-ups to work.
3. **SMS is Optional**: System works fine with email-only.
4. **GitHub Actions Limits**: Free tier includes 2000 minutes/month (more than enough).
5. **Render Starter Plan**: Doesn't support native cron jobs. Using GitHub Actions instead.

🆘 Troubleshooting

Follow-ups not processing?

1. Check GitHub Actions logs
2. Verify CRON_SECRET matches in GitHub and Render
3. Check Render logs for errors
4. Ensure API endpoint returns 200

Emails not sending?

1. Verify SMTP credentials in Render
2. Test SMTP connection
3. Check spam folders
4. Review Render logs for email errors

Need Help?

- Read full guide: `/home/ubuntu/AUTOMATED_FOLLOWUPS_SETUP.txt`
- Check GitHub Issues: https://github.com/profyt7/carelinkai/issues

📈 Next Steps

After deployment:
1. Monitor first 24 hours of execution
2. Create test inquiry to verify system
3. Check email delivery
4. Review follow-up completion rate
5. Adjust rules based on response patterns

🎉 That's It!

You're ready to deploy! The system will automatically:

- Process follow-ups every 6 hours

- Send personalized emails to families

- Track all follow-up activities

- Update inquiry status

Deploy now and start automating your follow-ups! 🚀